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Figures

Figure 1

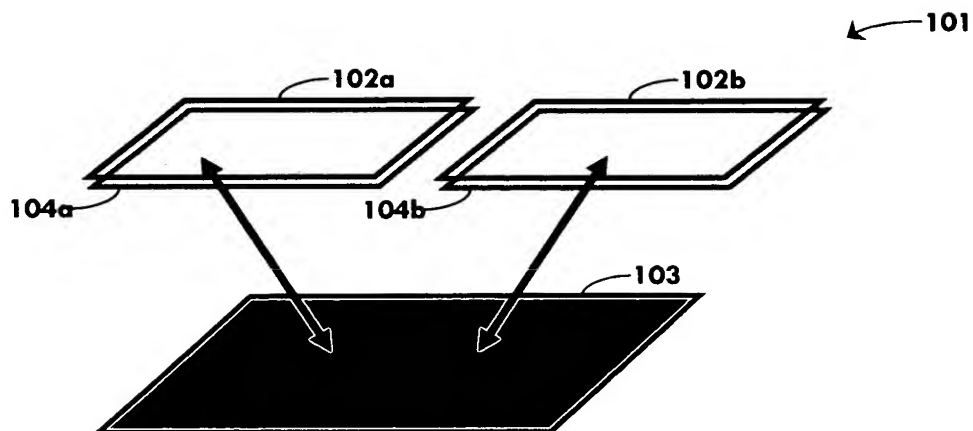


Figure 2

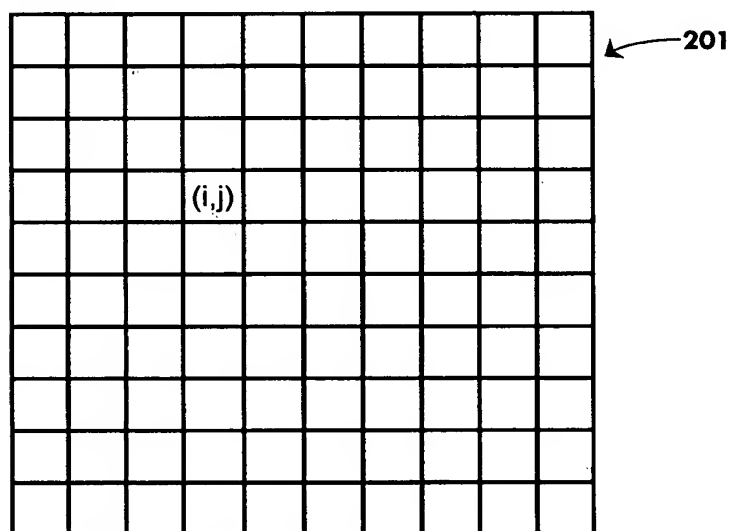


Figure 3

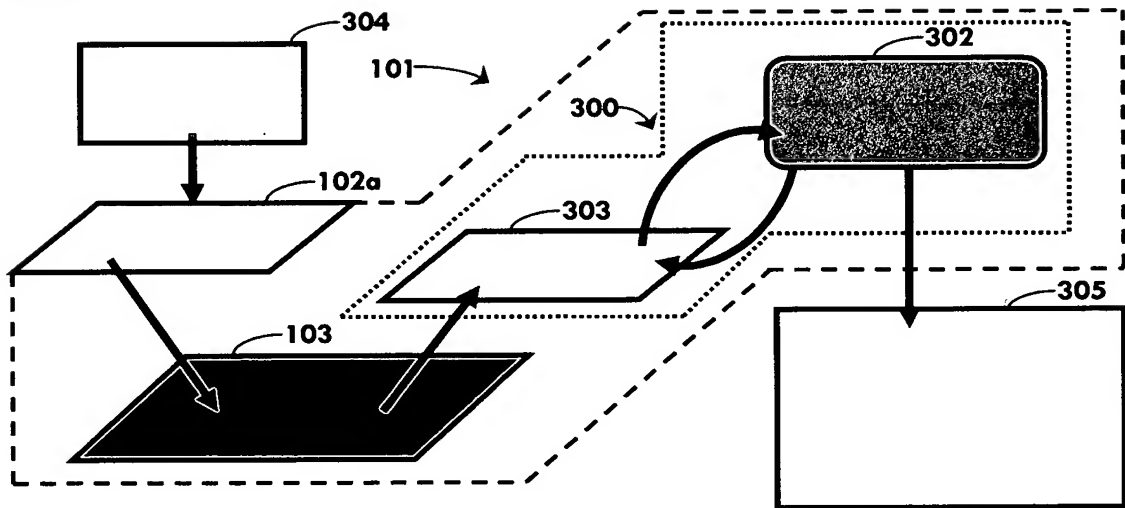


Figure 4

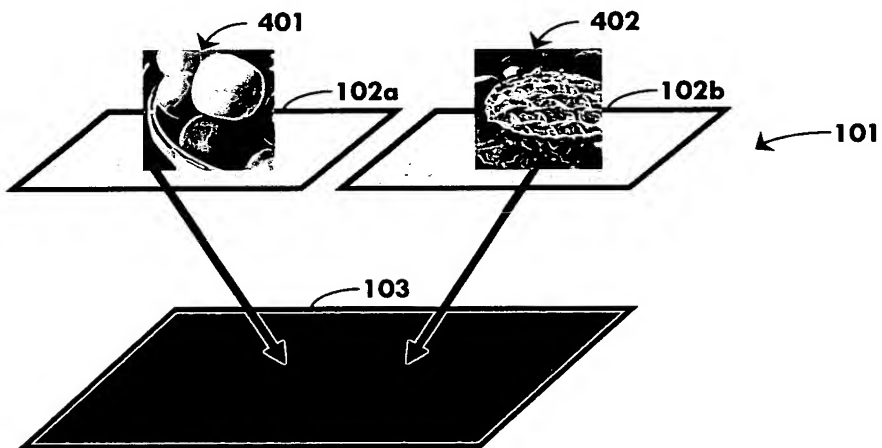


Figure 5

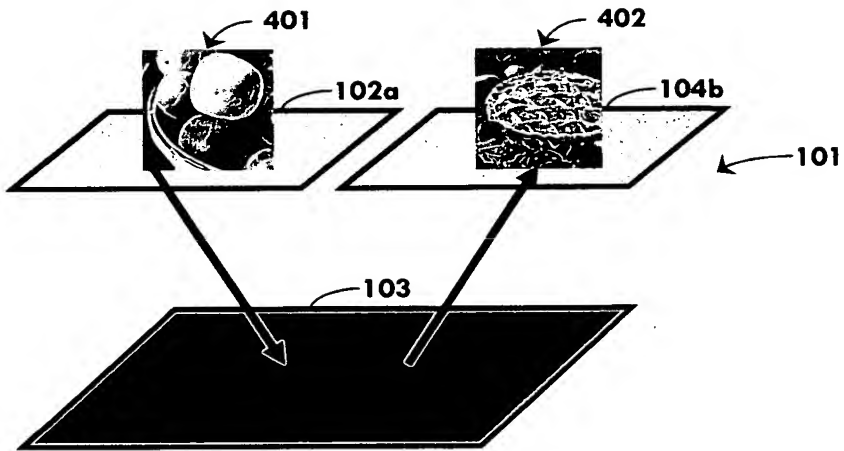


Figure 6

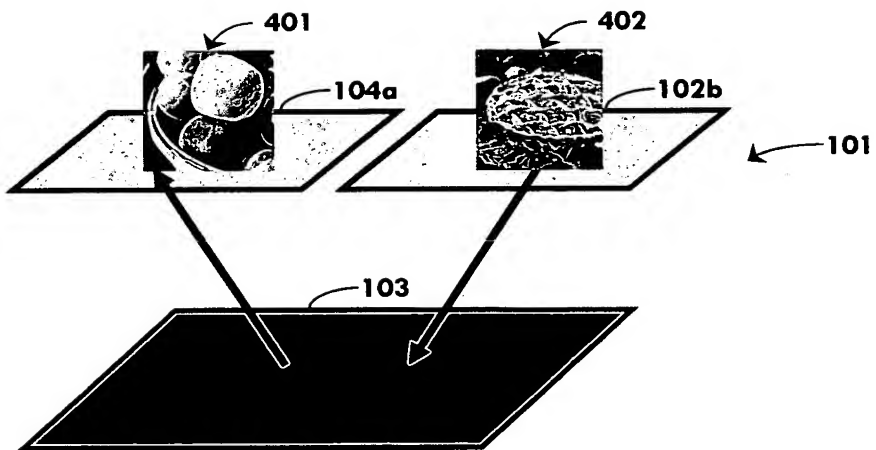


Figure 7

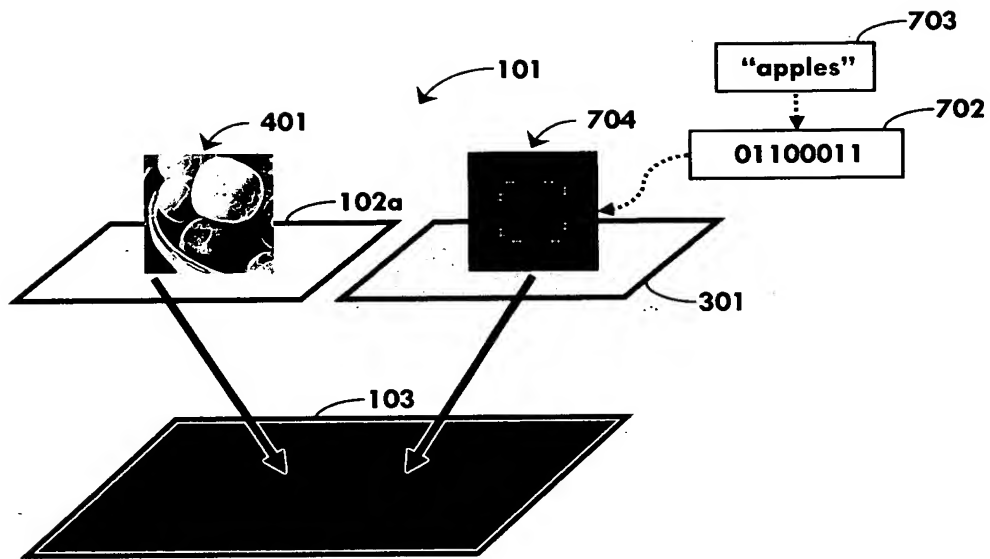


Figure 8

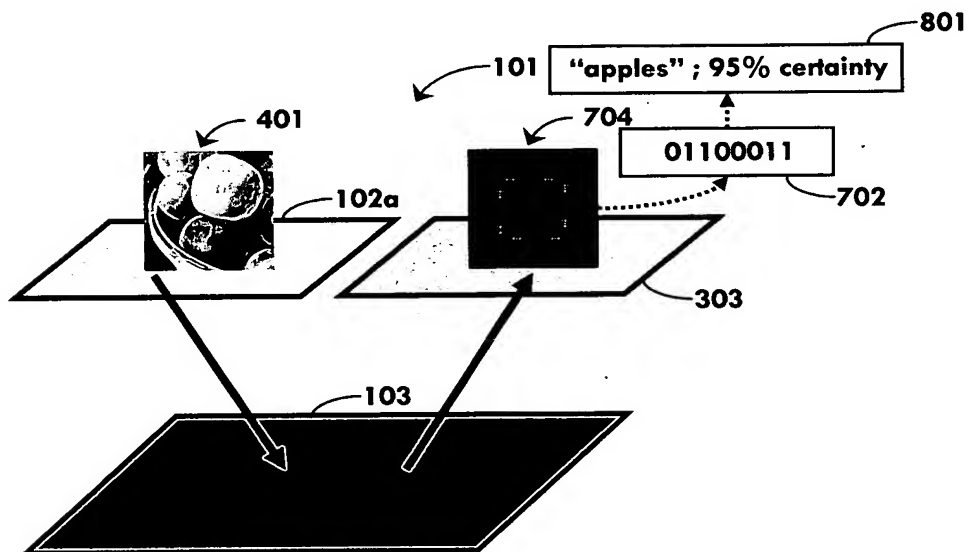


Figure 9

Input information to a buffer

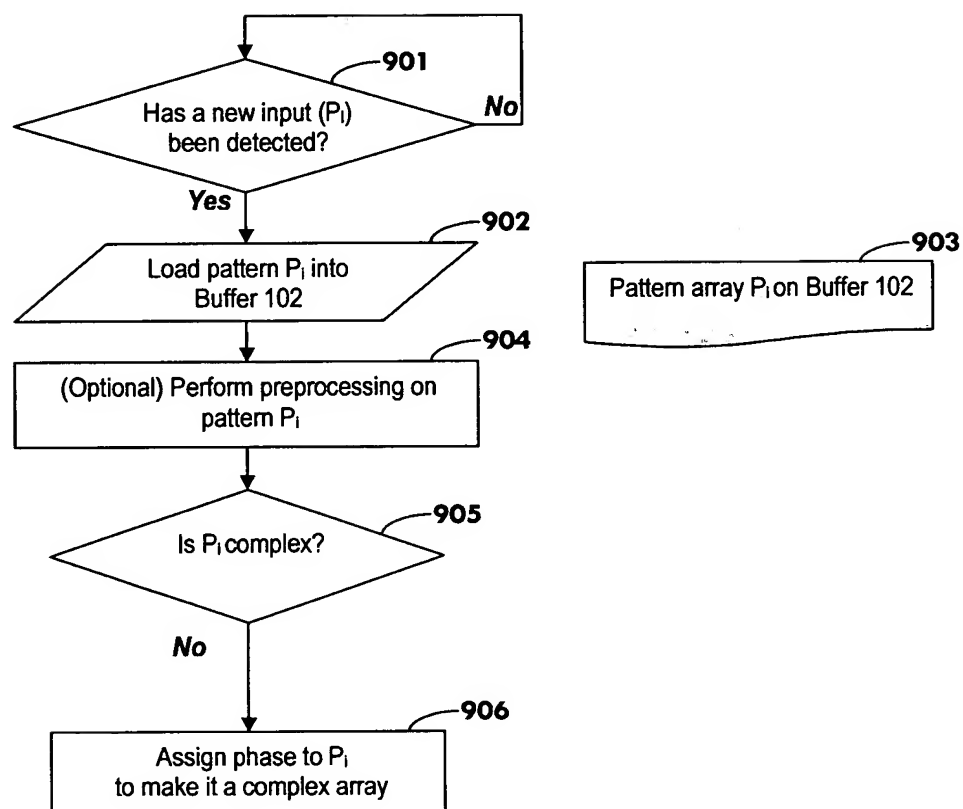


Figure 10

Transport information from buffer to cortex or cortex to buffer

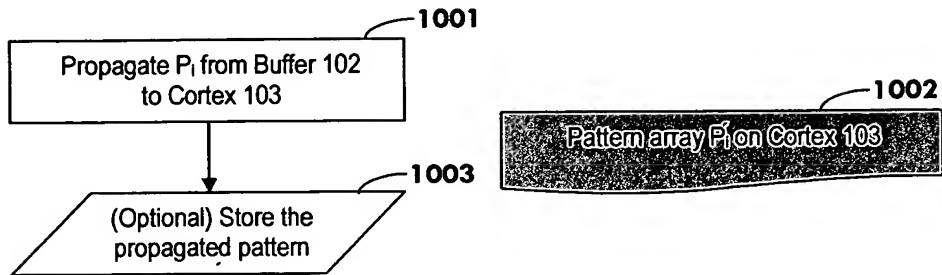


Figure 11

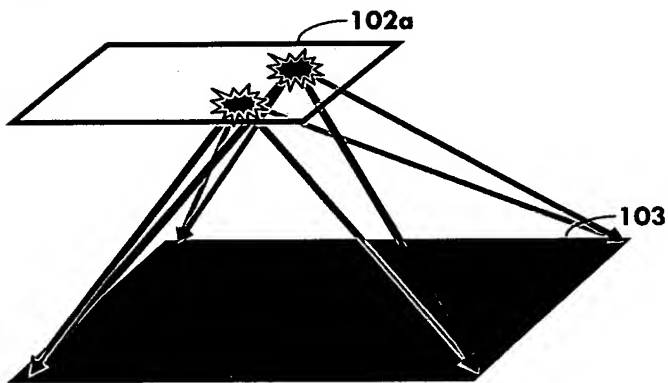


Figure 12

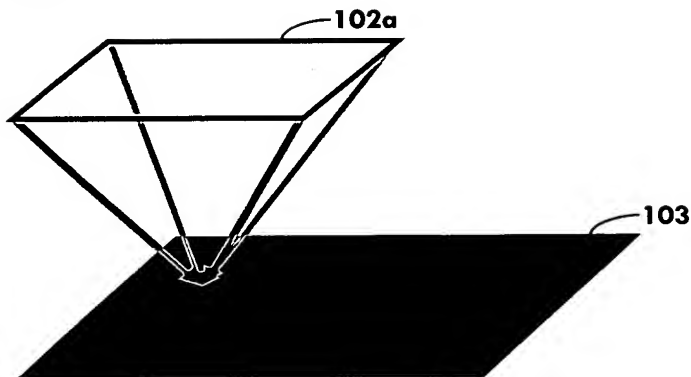


Figure 13

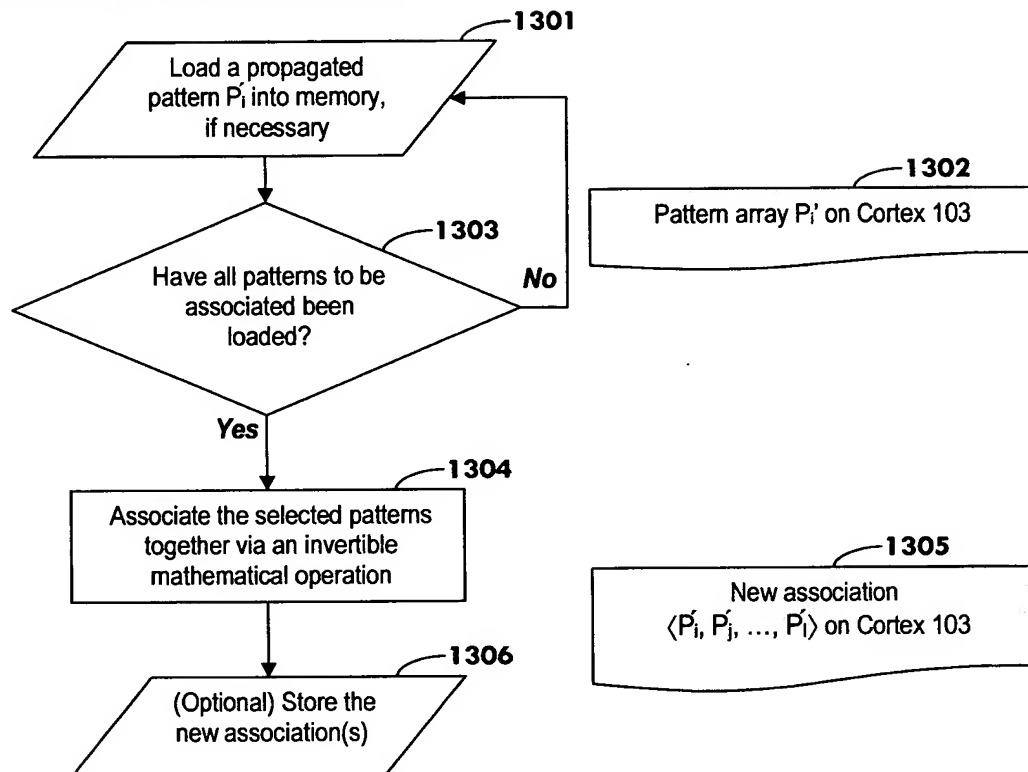
Associate two or more patterns

Figure 14

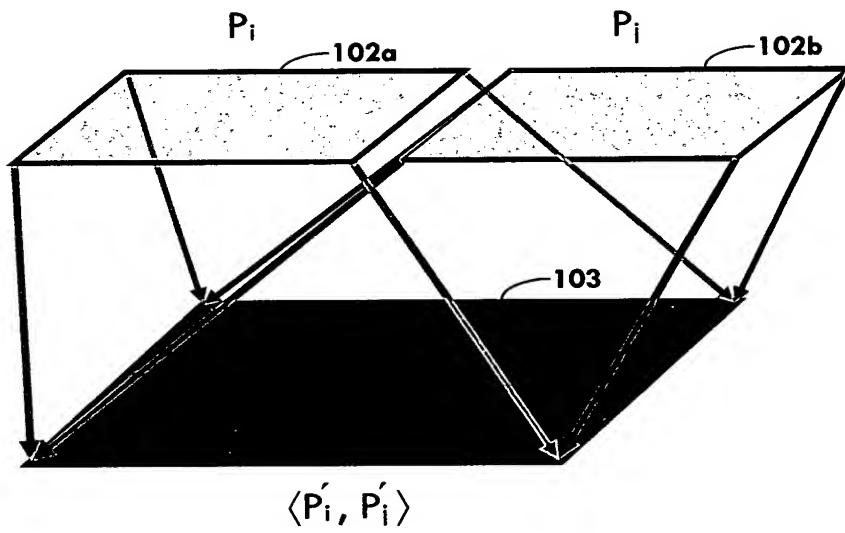


Figure 15

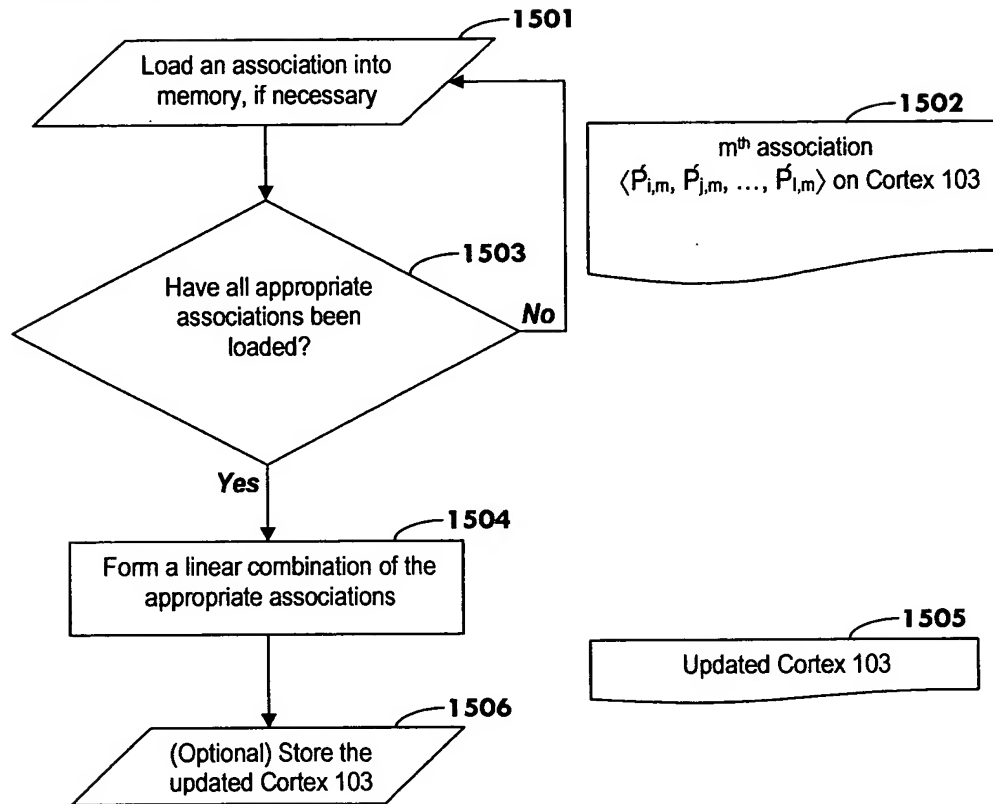
Superpose two or more associations

Figure 16

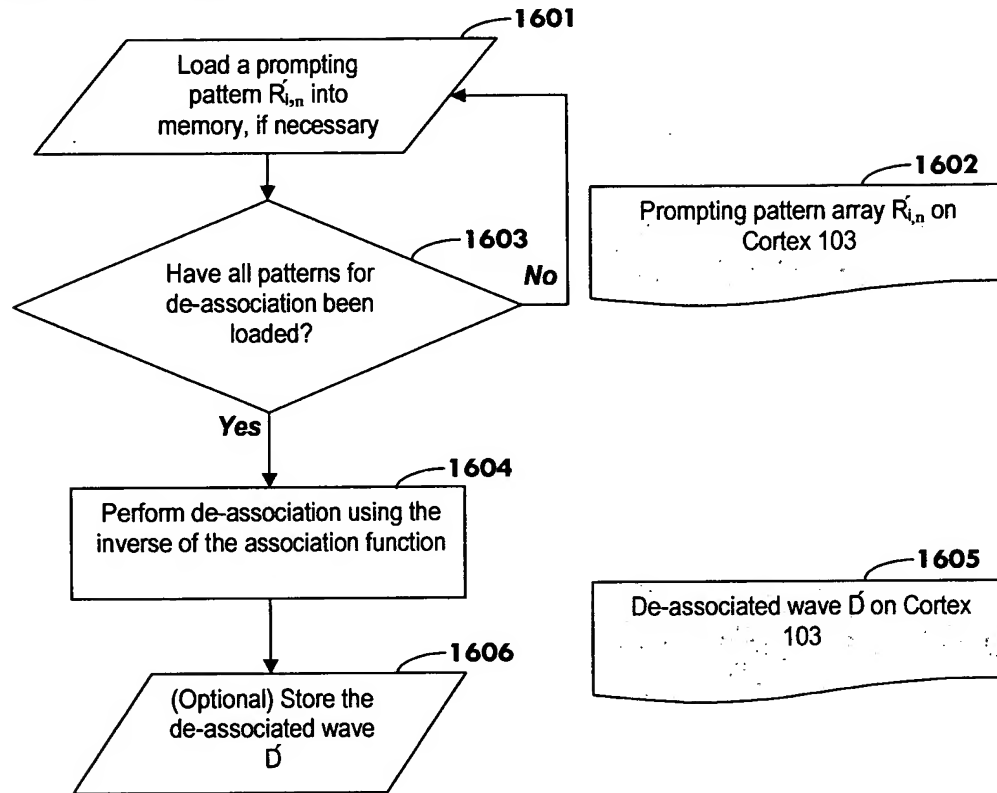
De-associate a pattern from a stored cortex

Figure 17

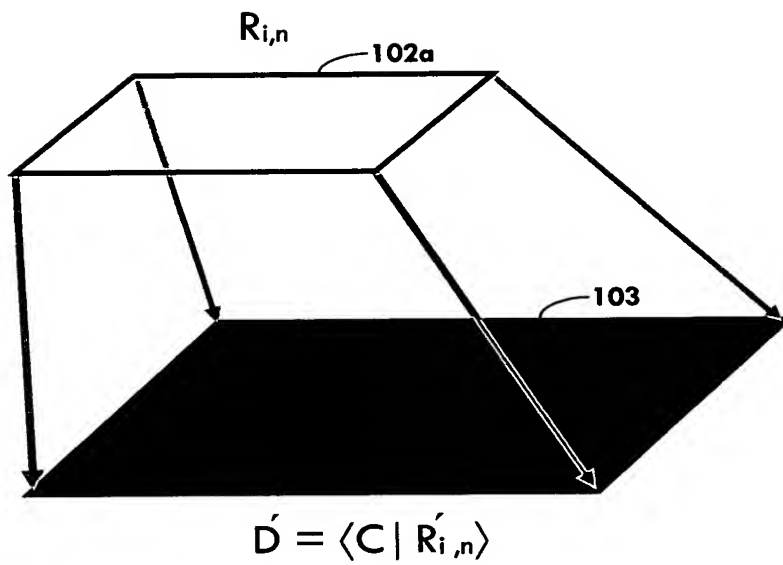


Figure 18

Export buffer information

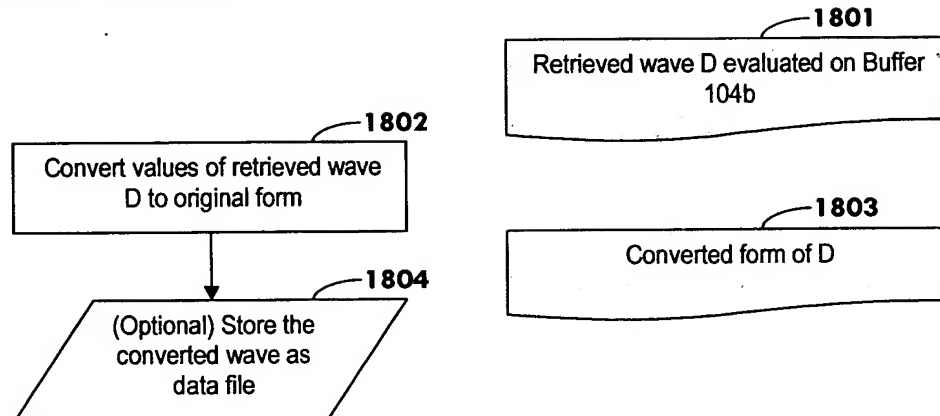


Figure 19

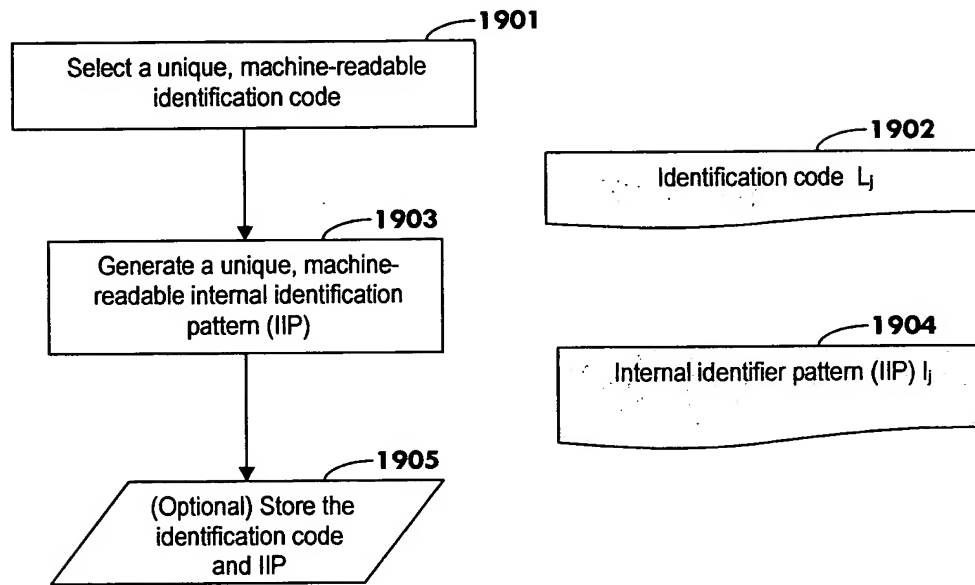
Generate an internal identification pattern (IIP)

Figure 20

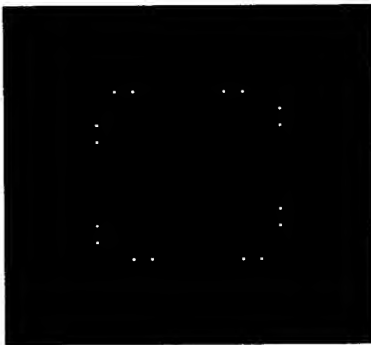


Figure 21

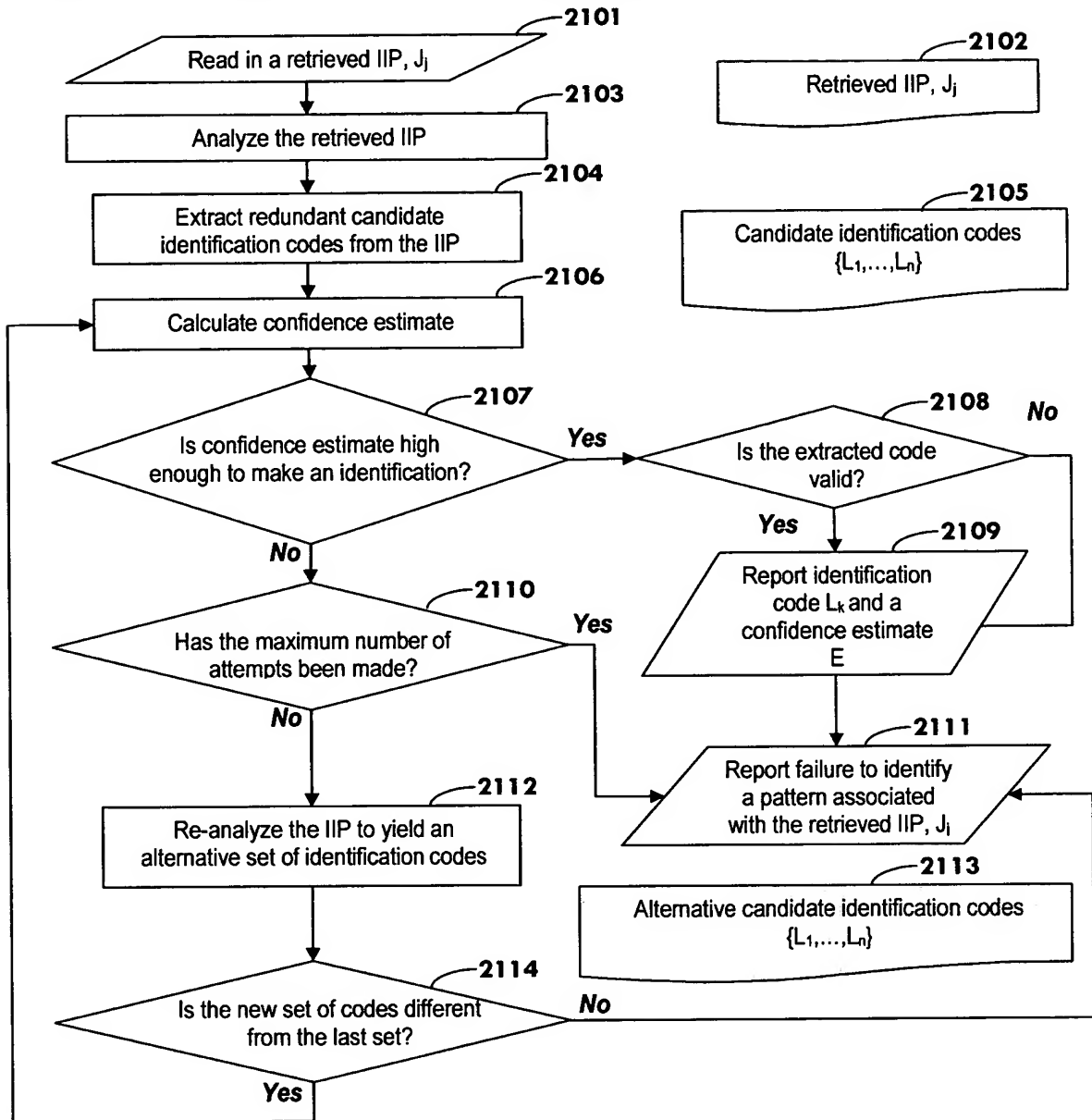
Decode a retrieved internal identification pattern (IIP)

Figure 22

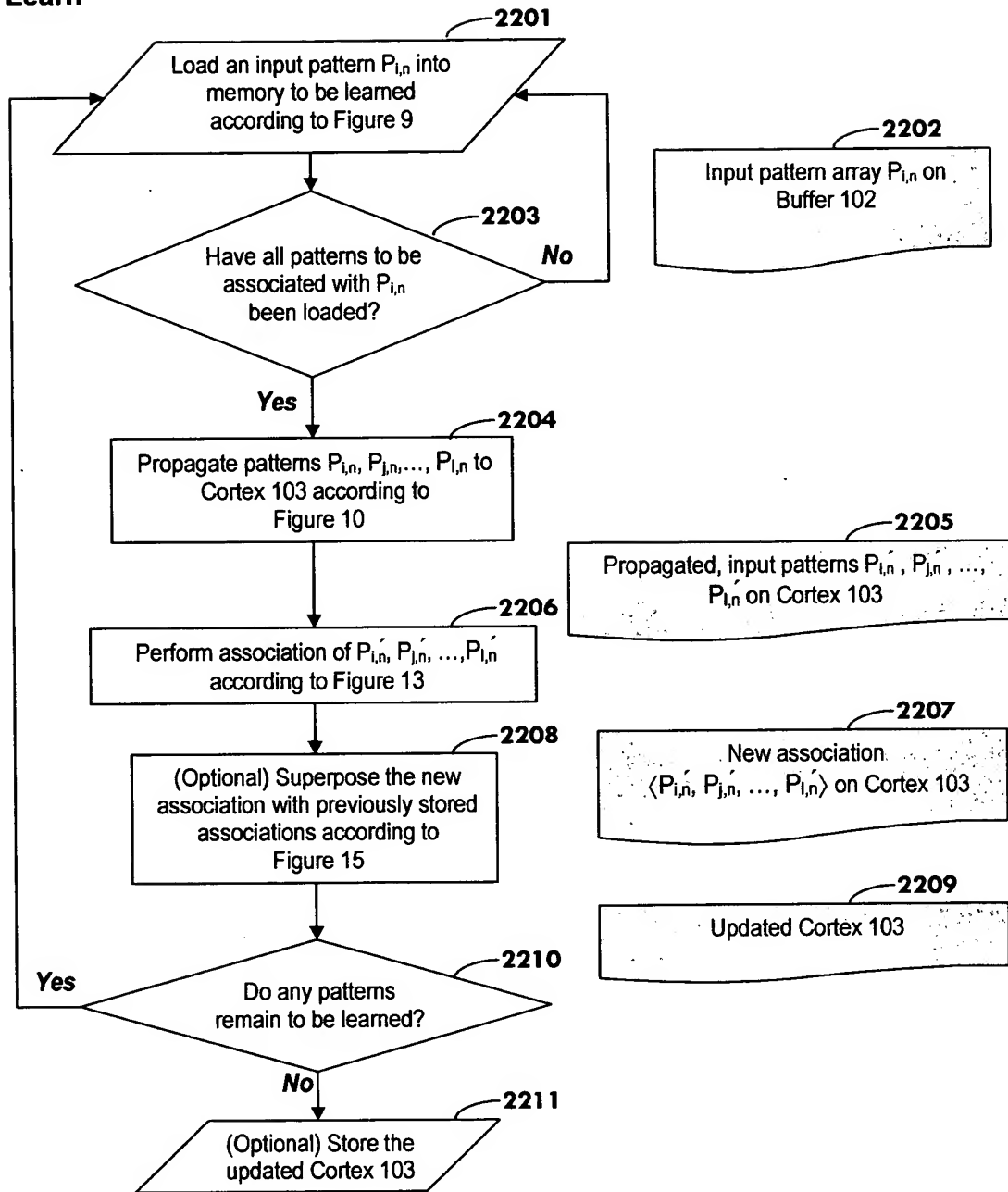
Learn

Figure 23

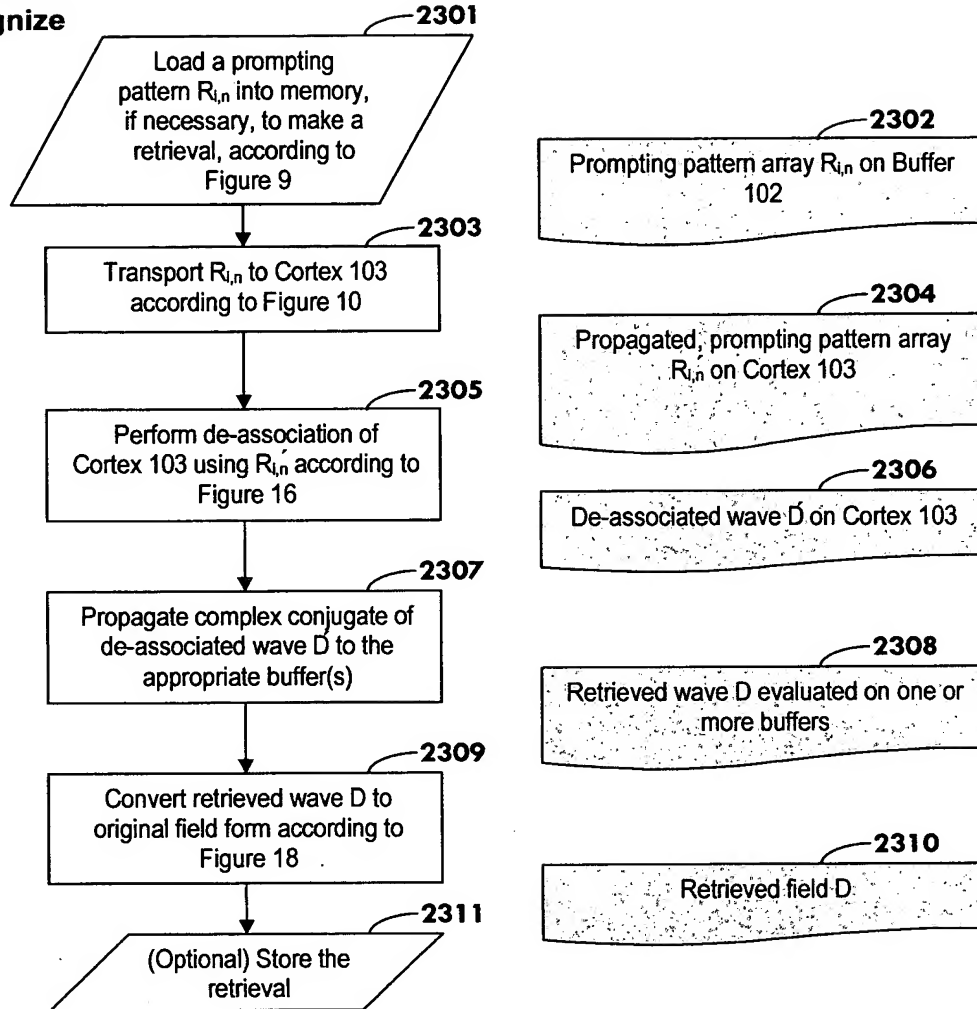
Recognize

Figure 24

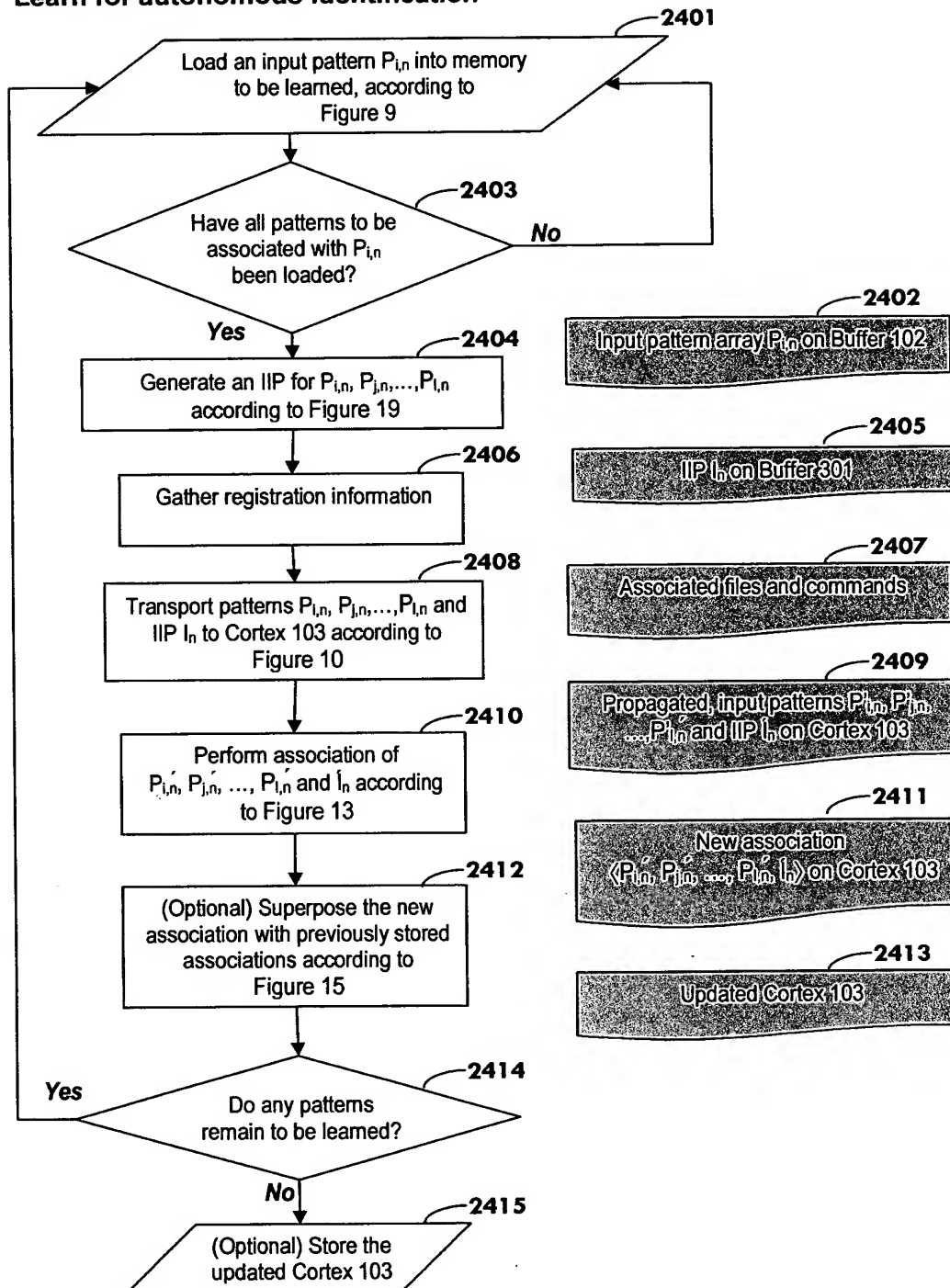
Learn for autonomous identification

Figure 25

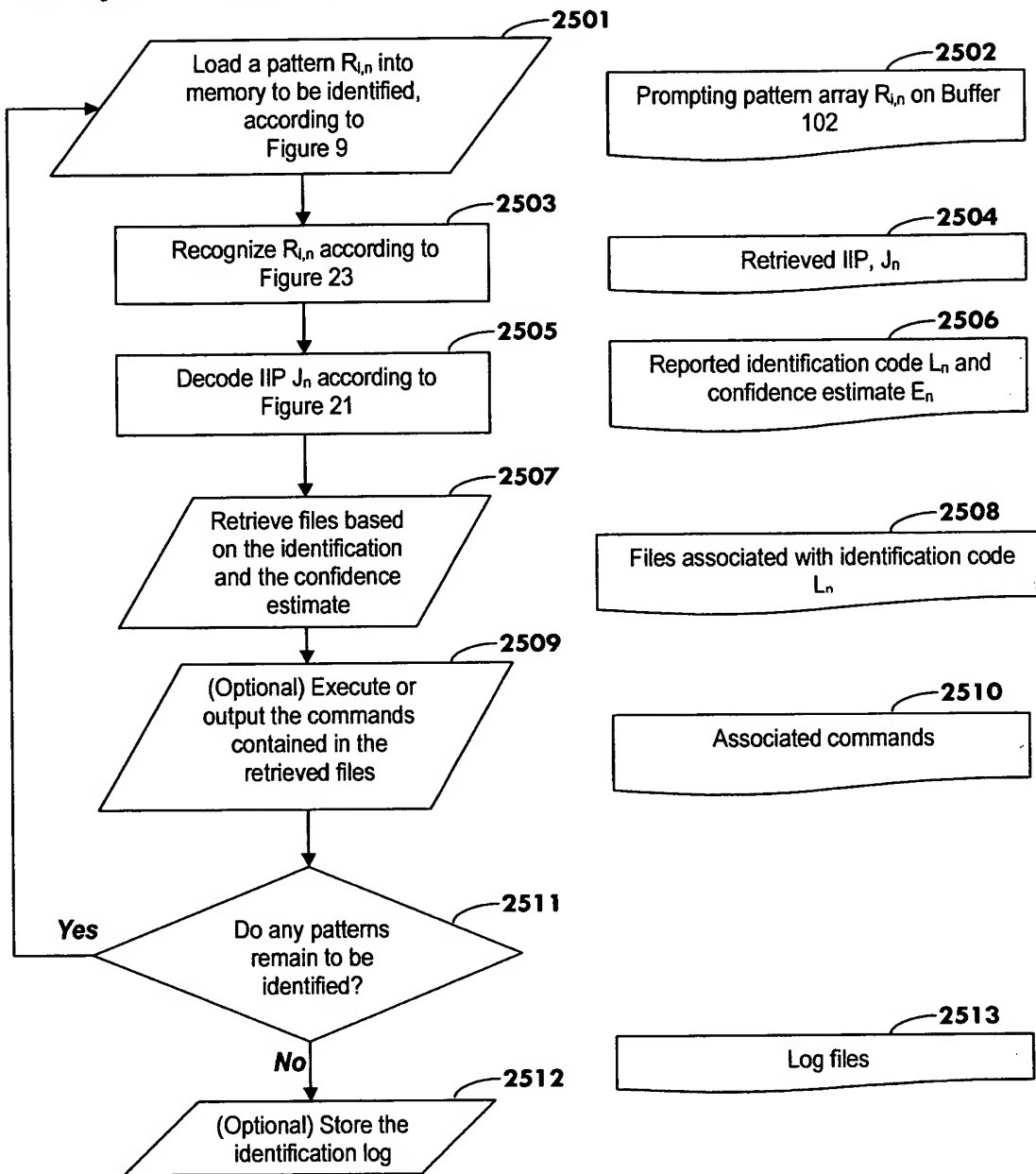
Identify and respond autonomously

Figure 26A

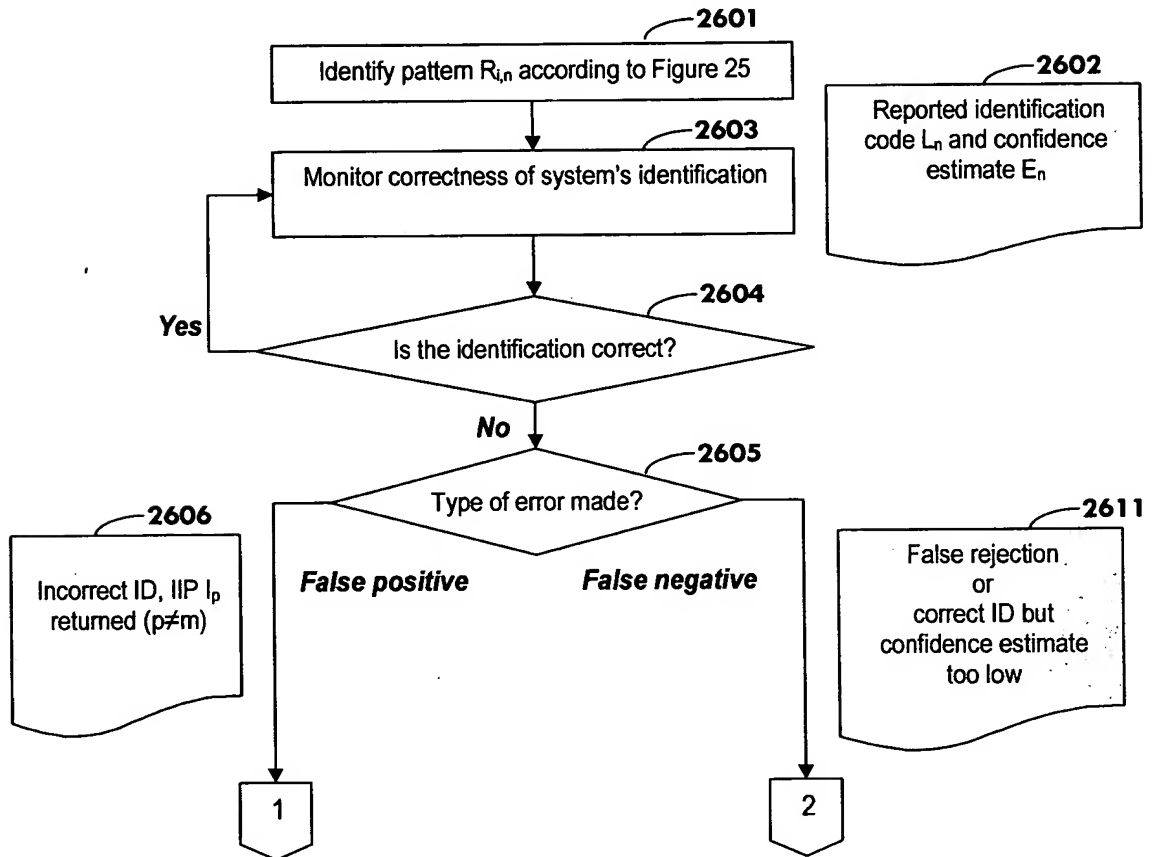
Adaptively improve identification performance through experience

Figure 26B

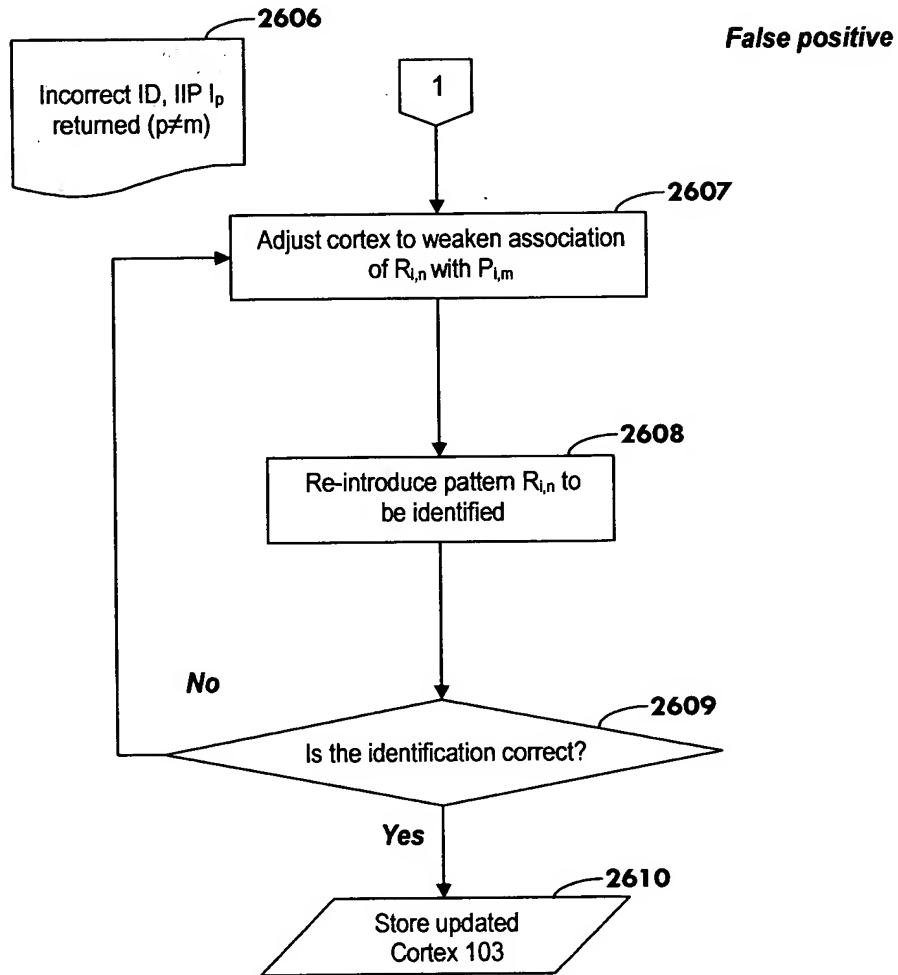
**Adaptively improve identification performance through experience
(continued)**

Figure 26C

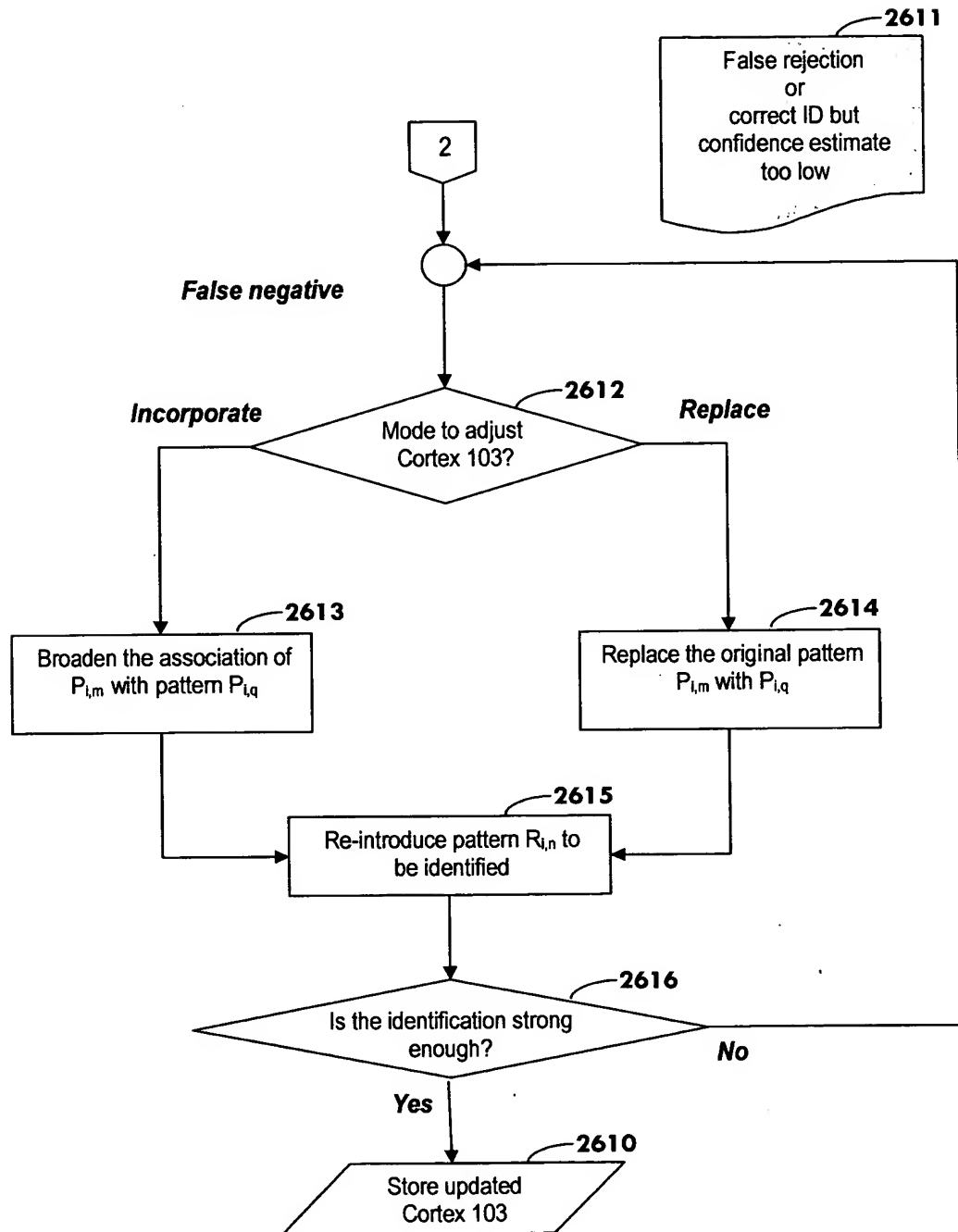
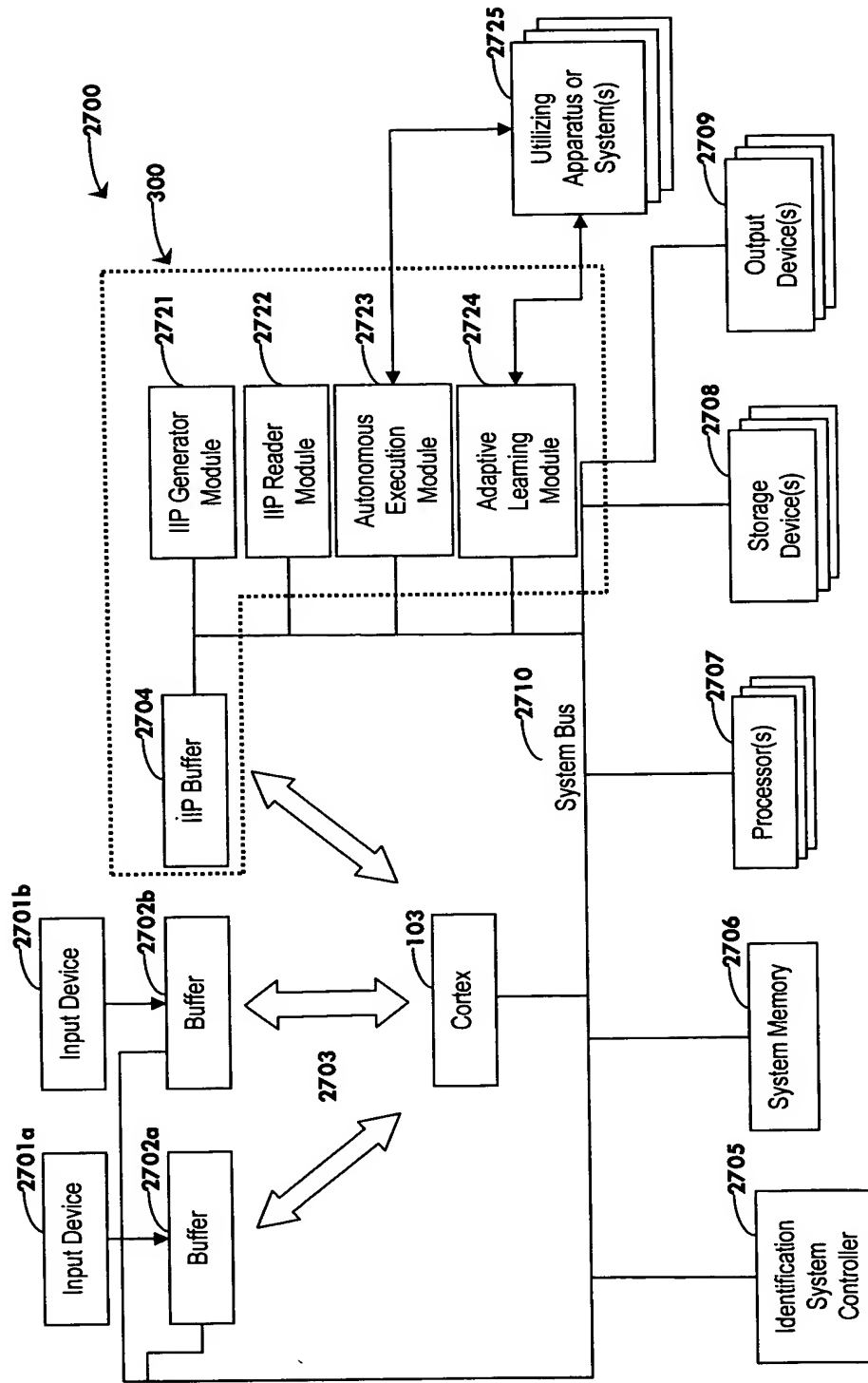
**Adaptively improve identification performance through experience
(continued)**

Figure 27



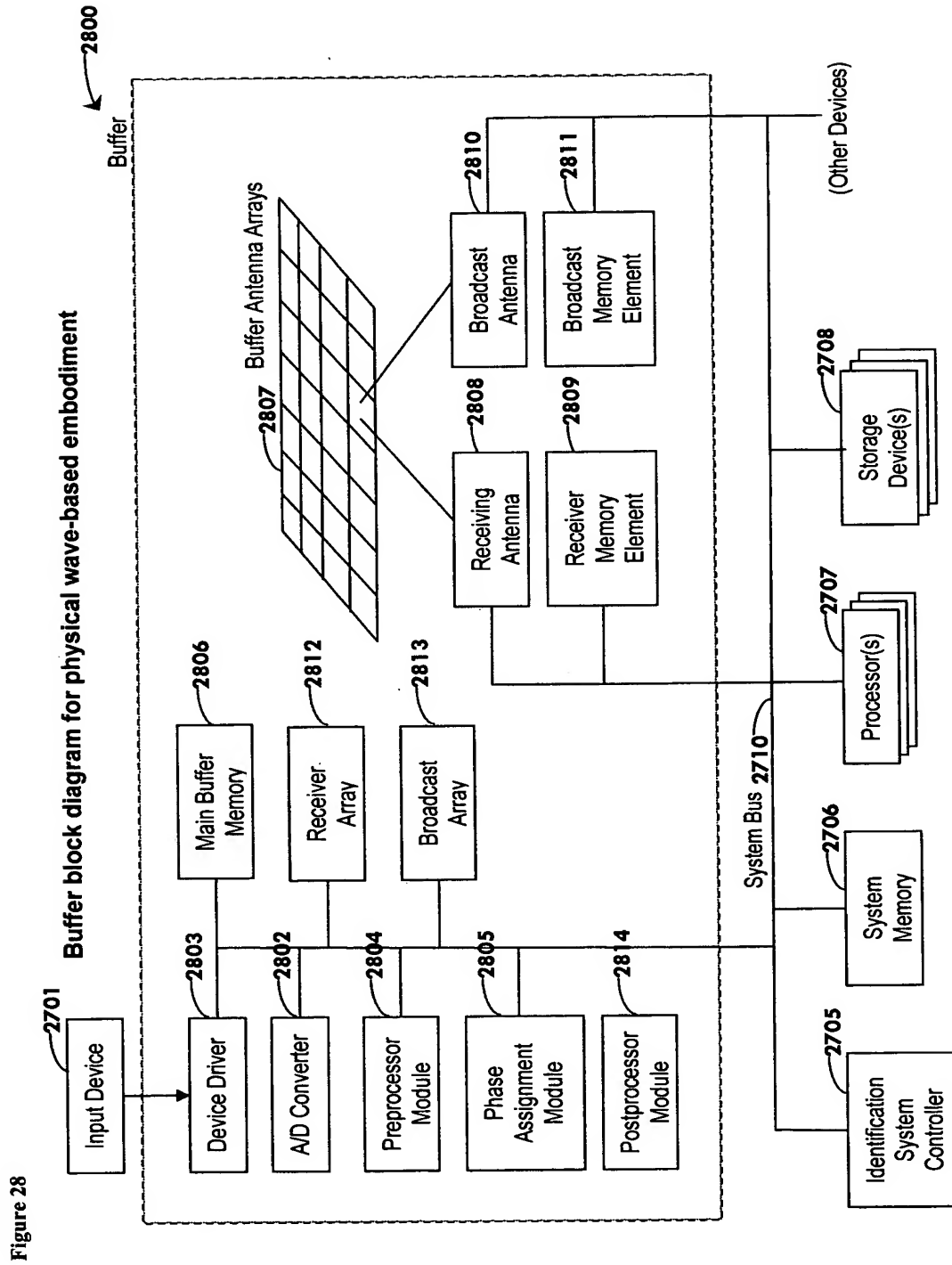


Figure 29

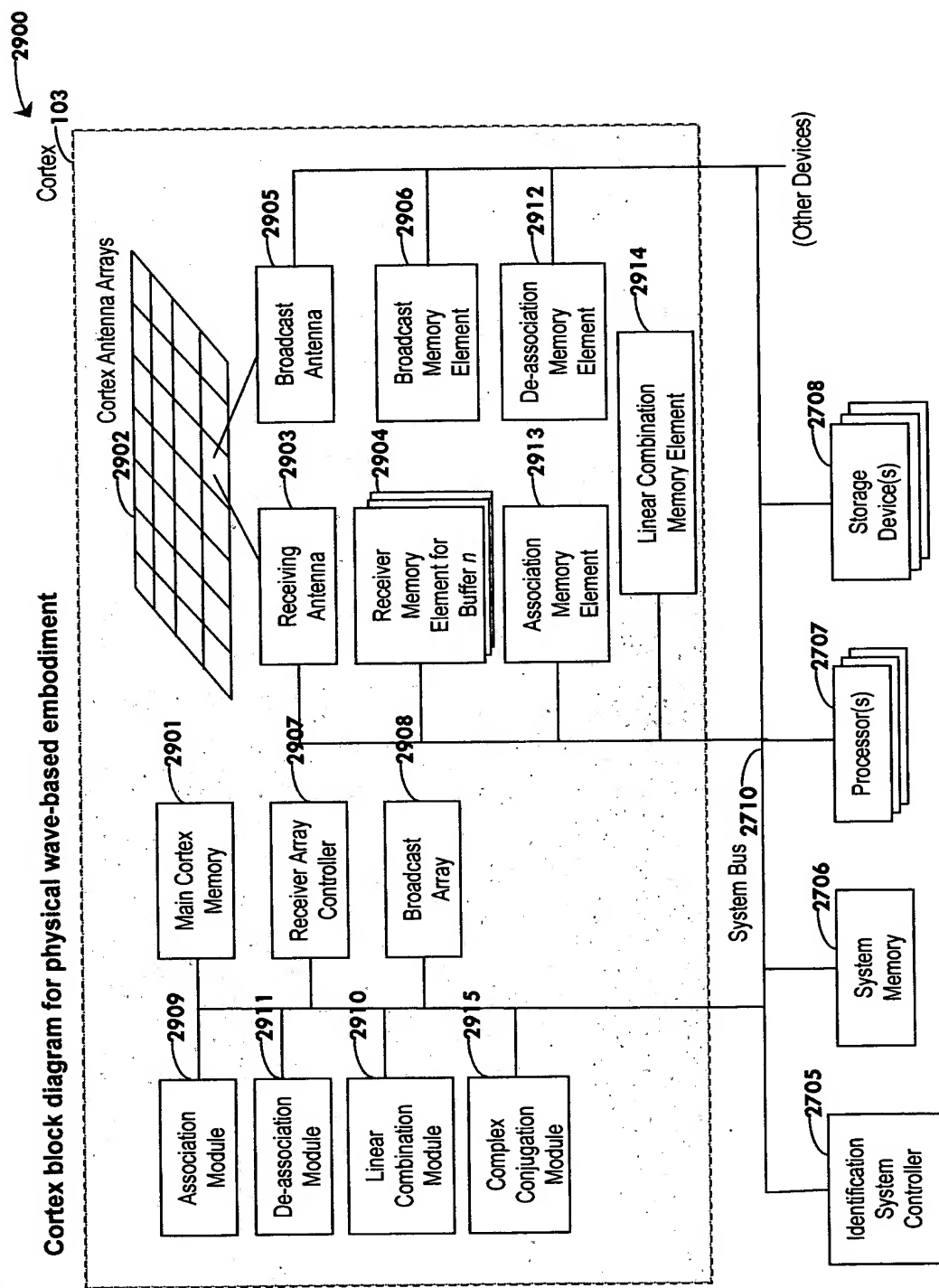


Figure 30

Buffer block diagram for software-based embodiment

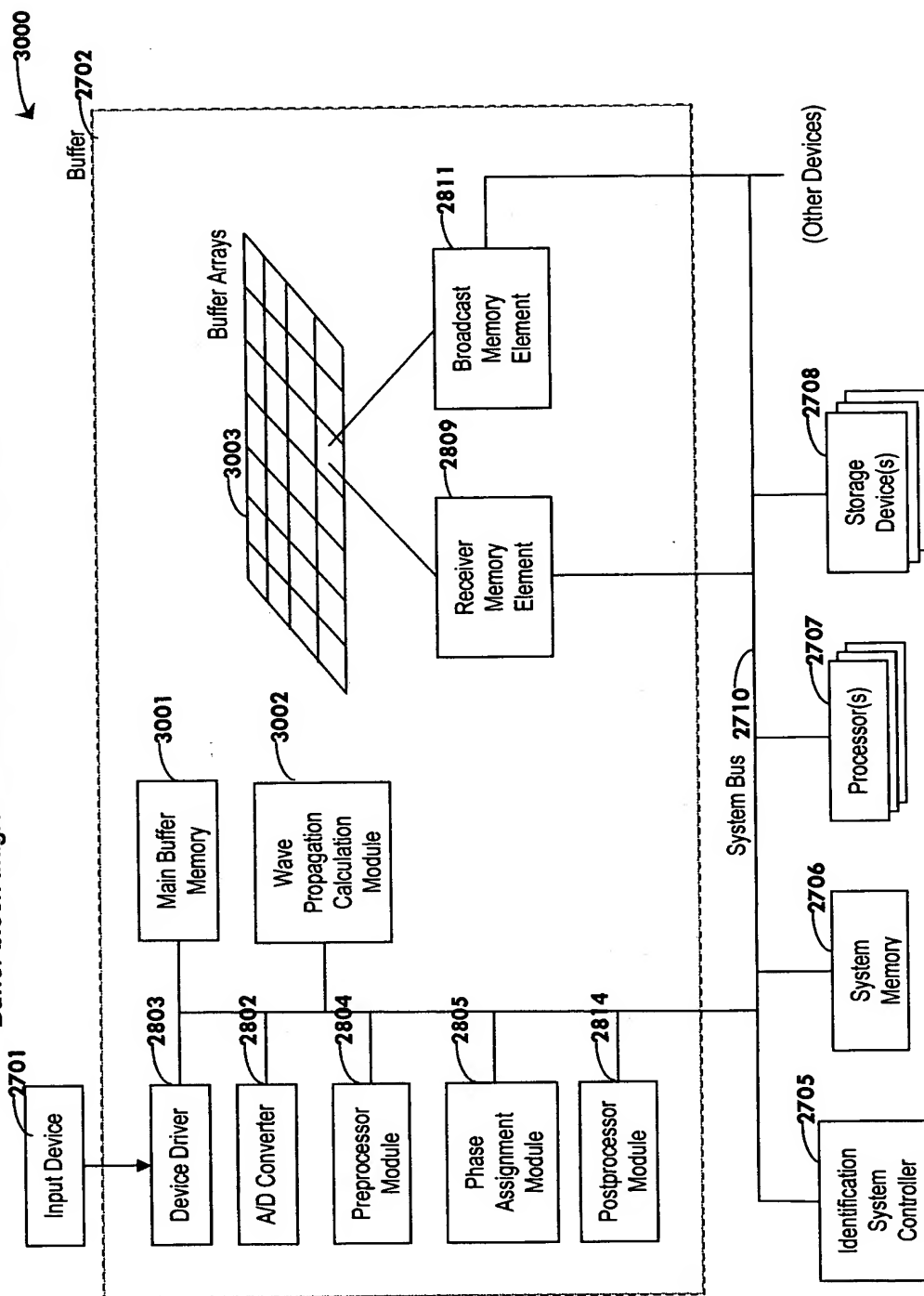


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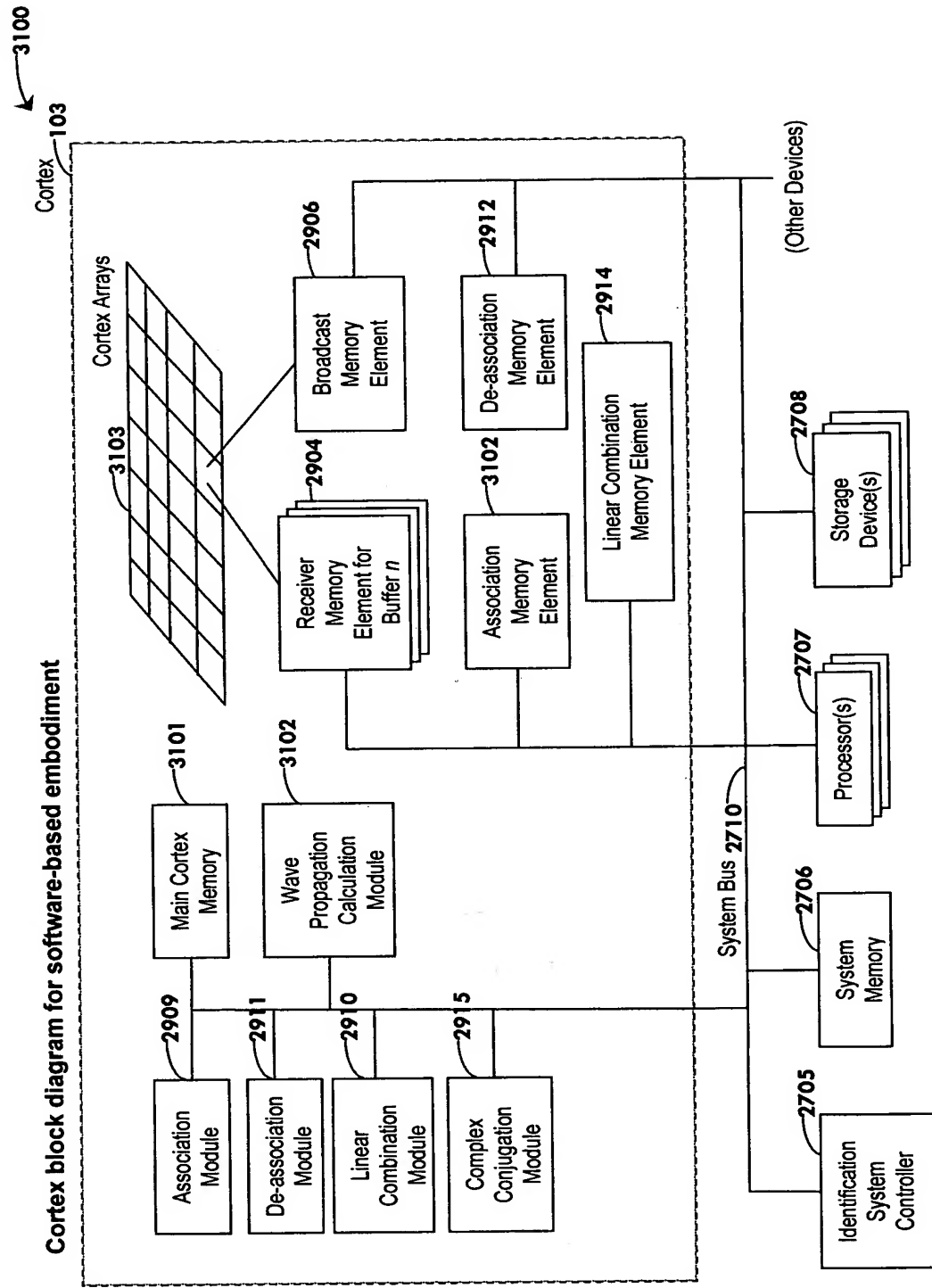


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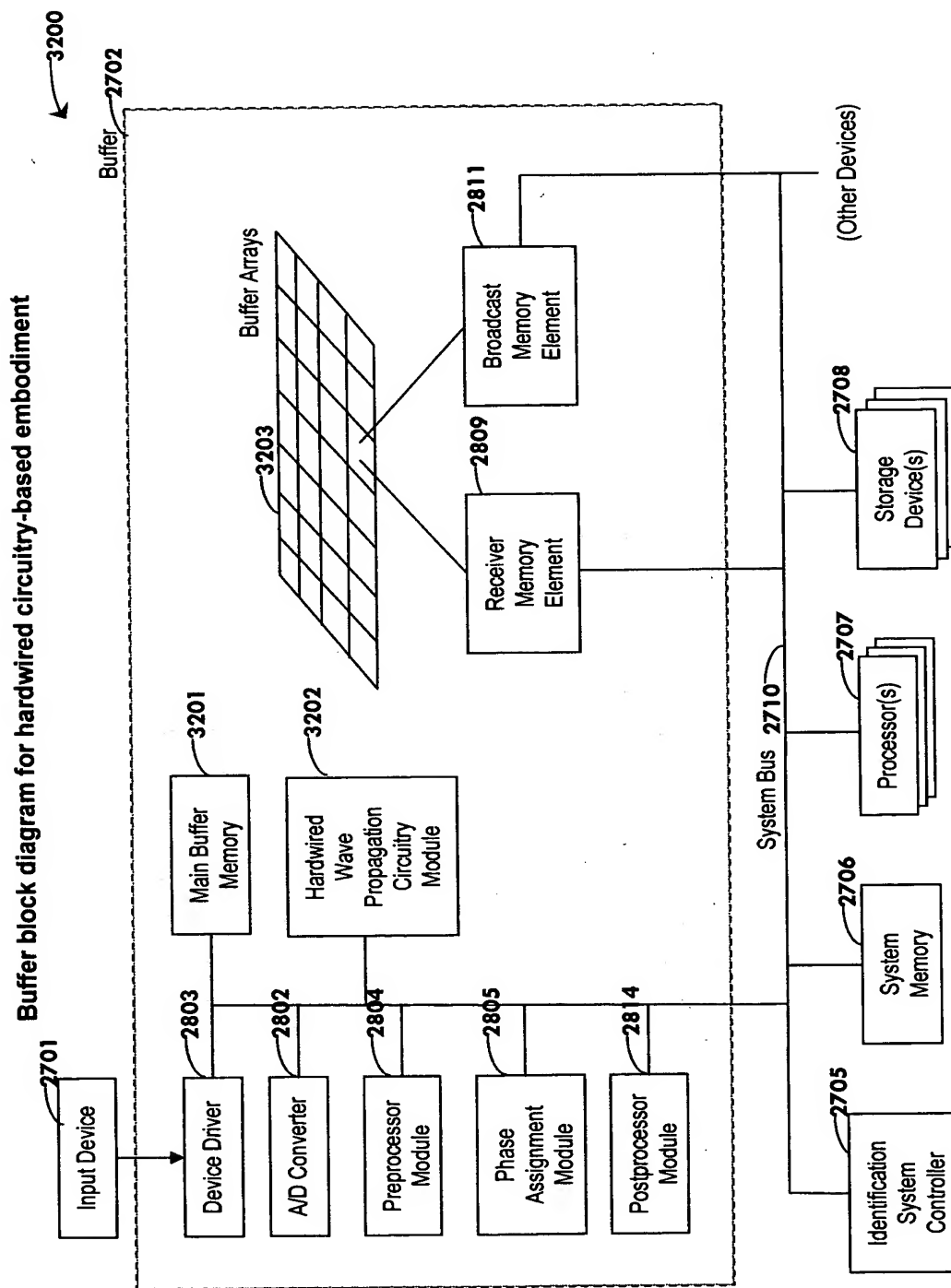


Figure 33

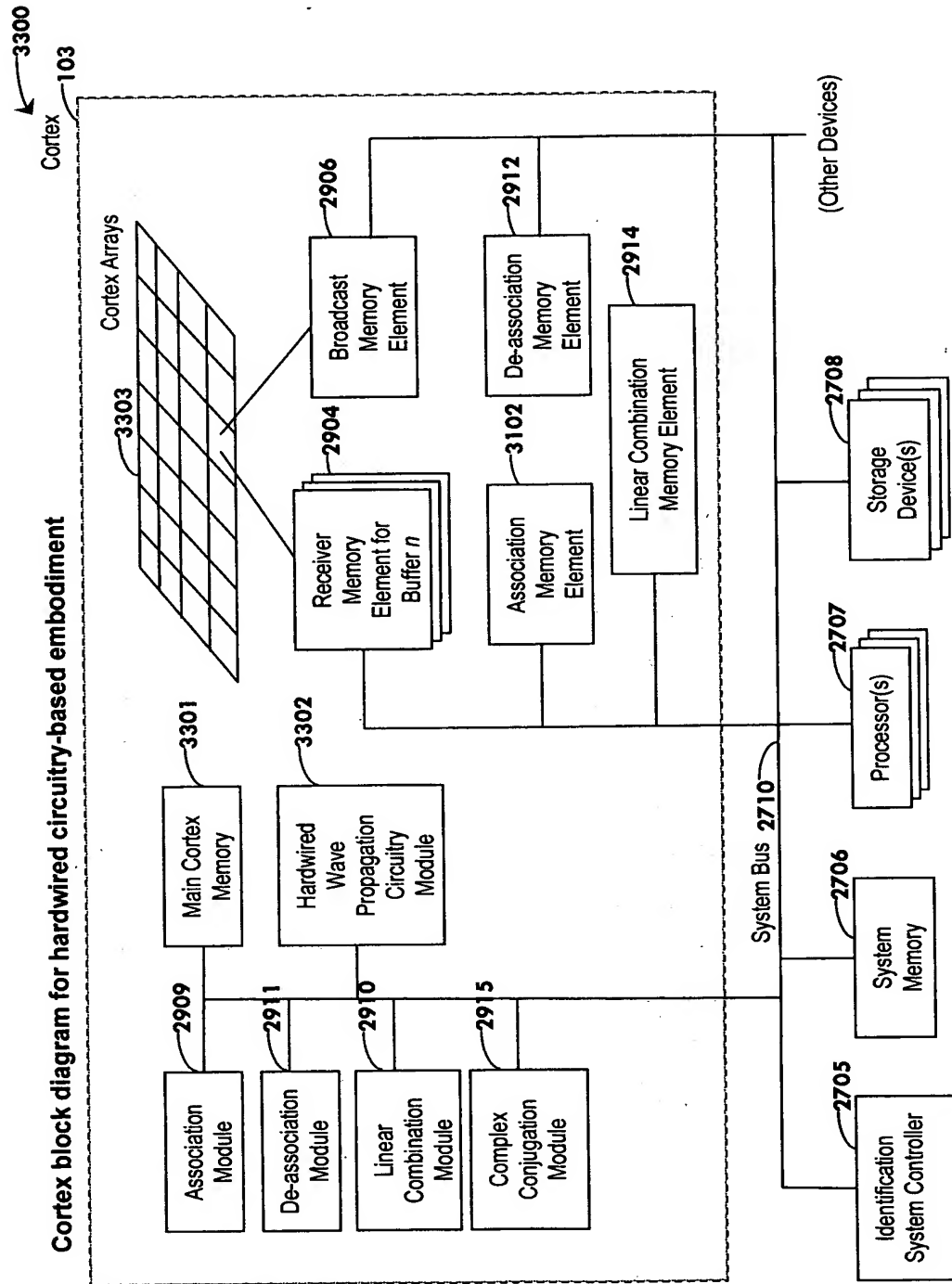


Figure 34

Wave propagation circuitry block diagram for hardwired circuitry-based embodiment

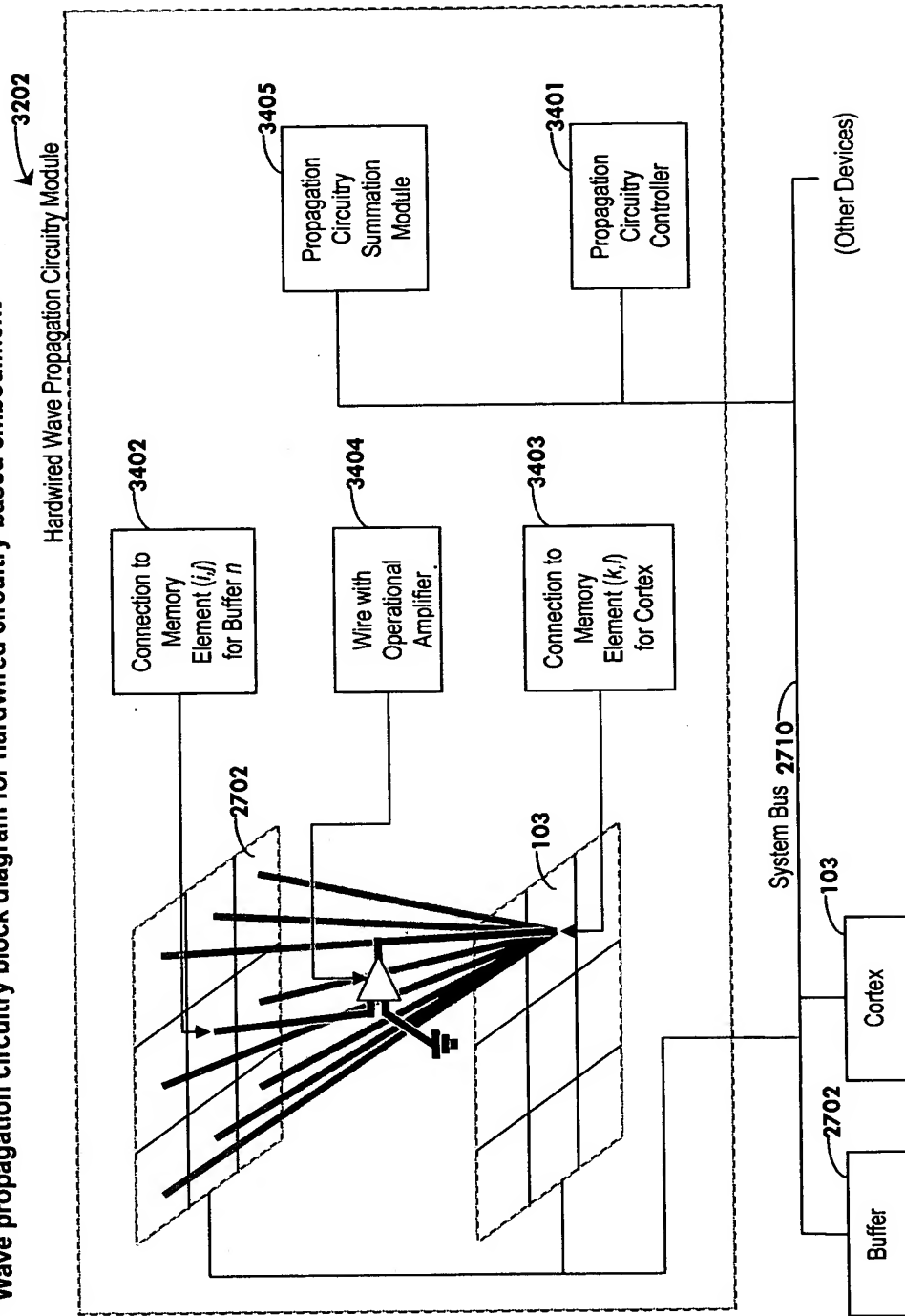


Figure 35

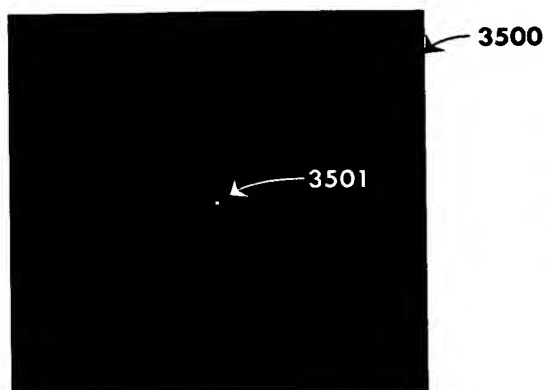


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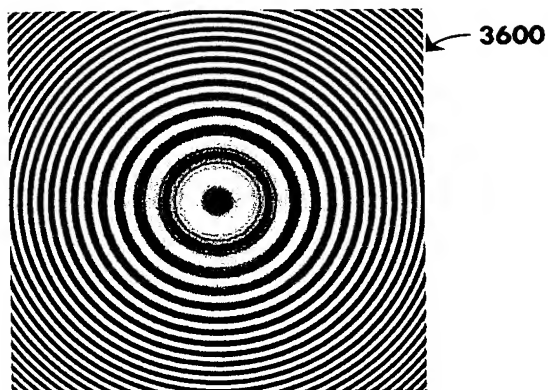


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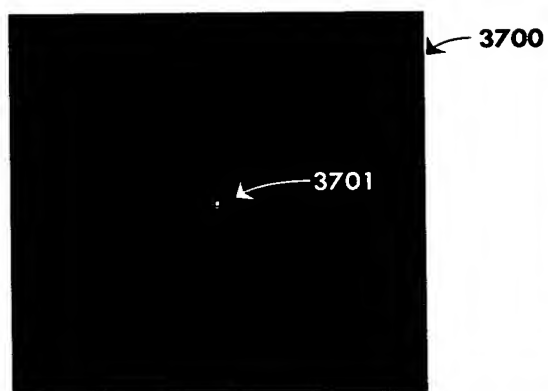


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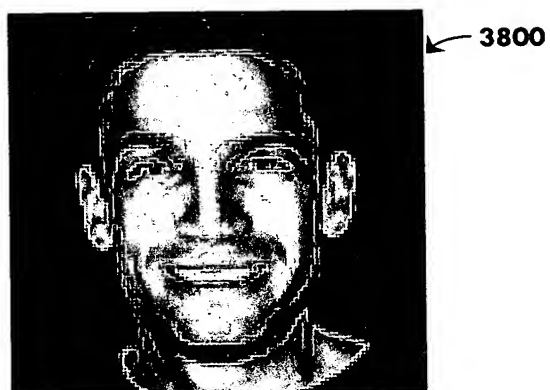


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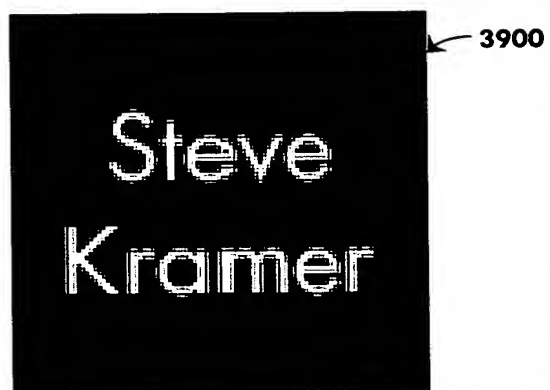


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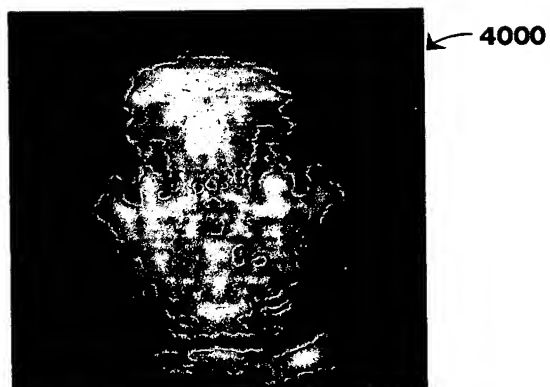


Figure 41



4100

Figure 42



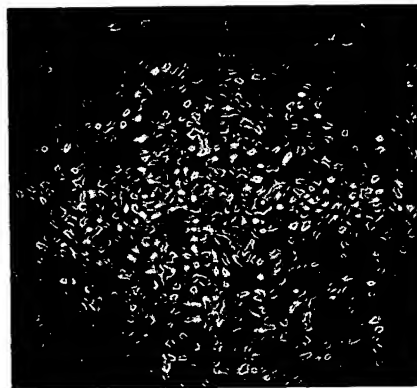
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Figure 43



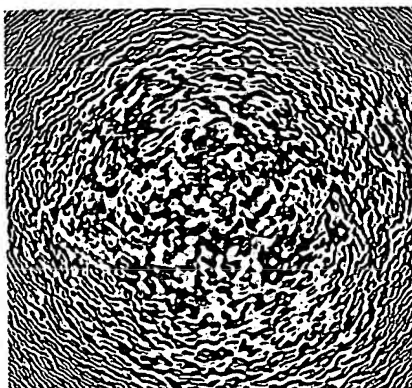
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Figure 44



4400

Figure 45



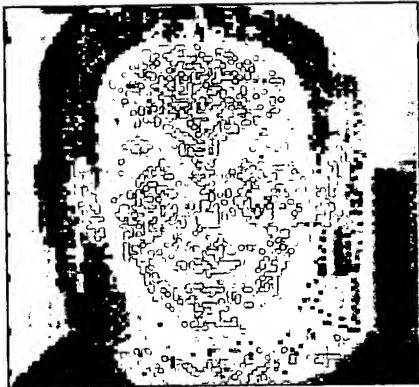
4500

Figure 46



4600

Figure 47



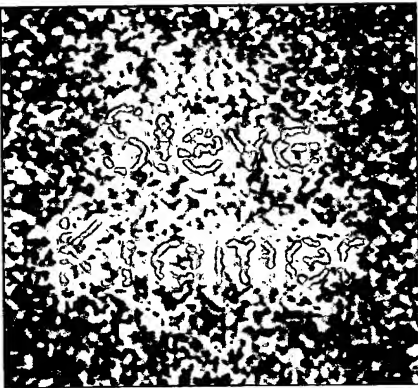
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Figure 48A



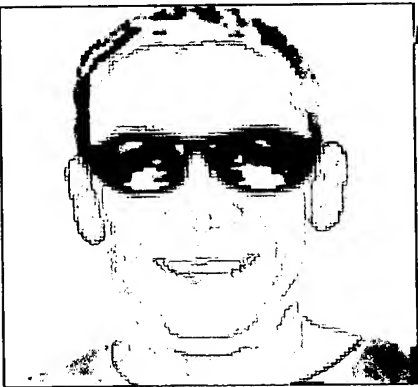
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Figure 48B



4801

Figure 49A



4900

Figure 49B



4901

Figure 50A



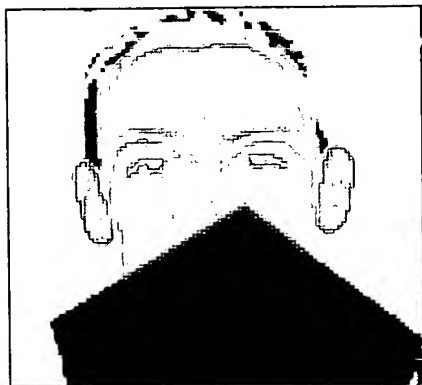
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Figure 50B



5001

Figure 51A



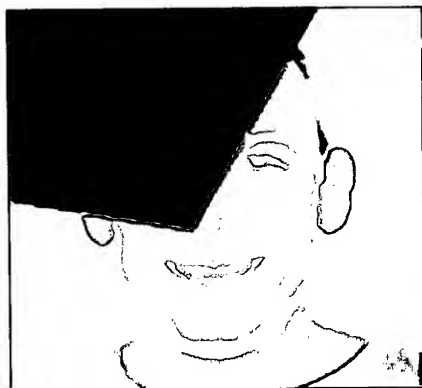
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Figure 51B



5101

Figure 52A



5200

Figure 52B



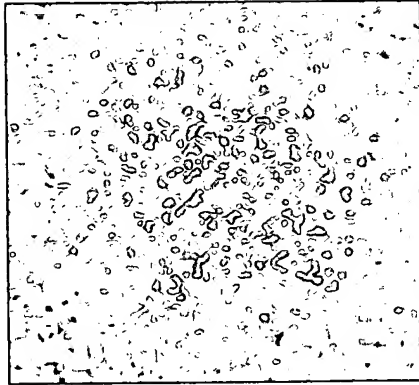
5201

Figure 53A



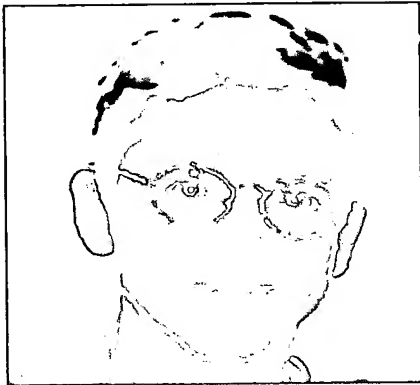
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Figure 53B



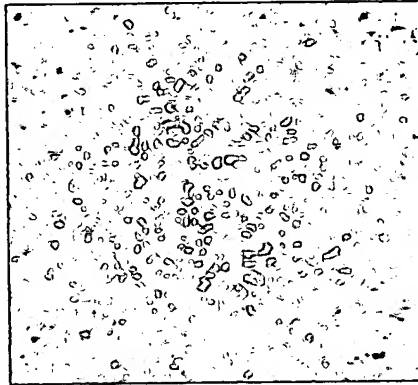
5301

Figure 54A



5400

Figure 54B



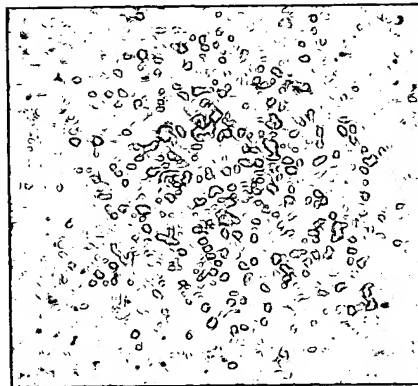
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Figure 55A



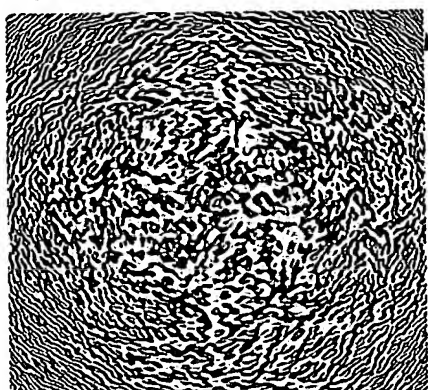
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Figure 55B



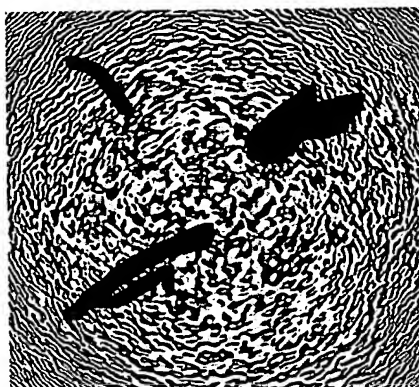
5501

Figure 56



5600

Figure 57



5700

Figure 58A



5800

Figure 58B



5801

Figure 59A



5900

Figure 59B



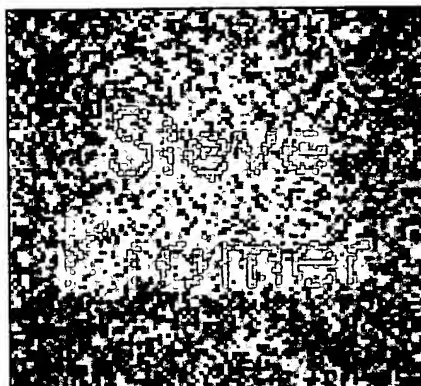
5901

Figure 60A



6000

Figure 60B



6001

Figure 61A



6100

Figure 61B



6101

Figure 62A



6200

Figure 62B



6201

Figure 63A



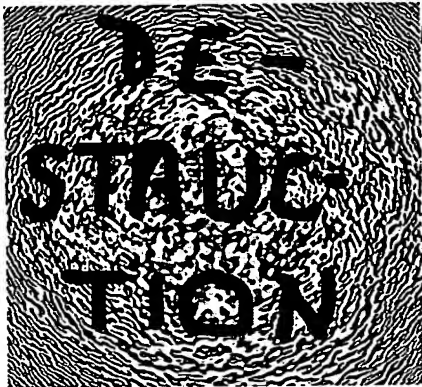
6300

Figure 63B



6301

Figure 64



6400

Figure 65A



3800

Figure 65B



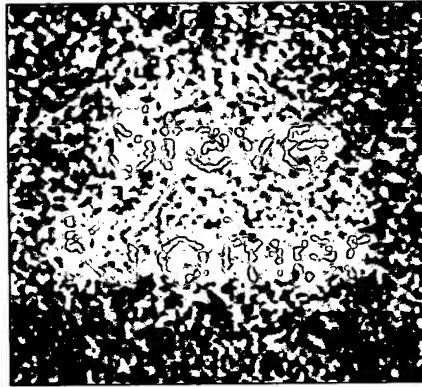
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Figure 66A



4800

Figure 66B



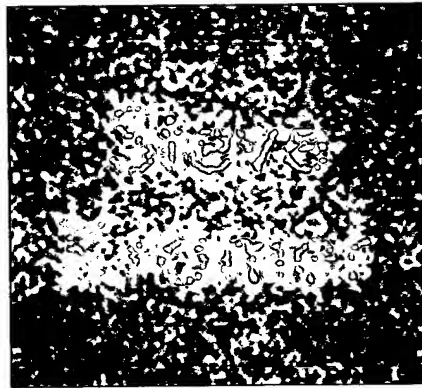
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Figure 67A



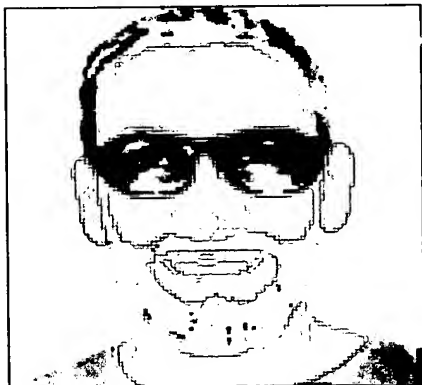
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Figure 67B



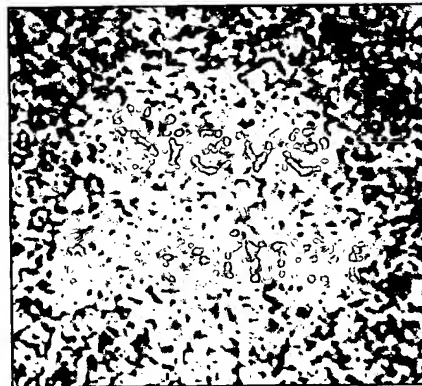
6701

Figure 68A



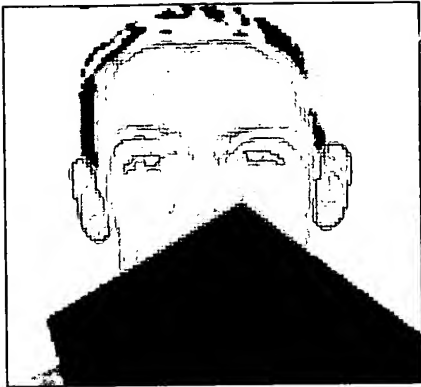
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Figure 68B



6801

Figure 69A



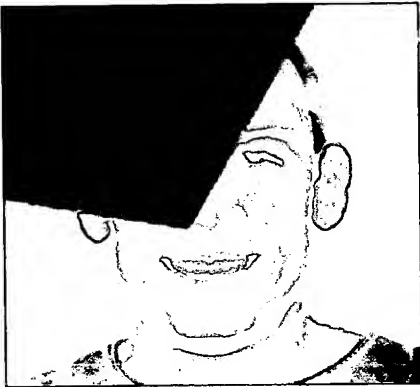
5100

Figure 69B



6901

Figure 70A



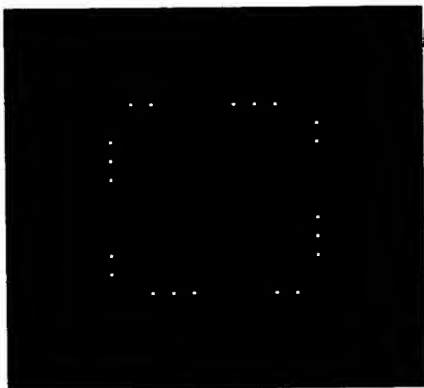
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Figure 70B



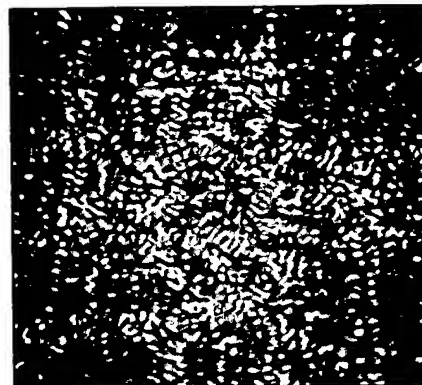
7001

Figure 71



7100

Figure 72



7200

Figure 73

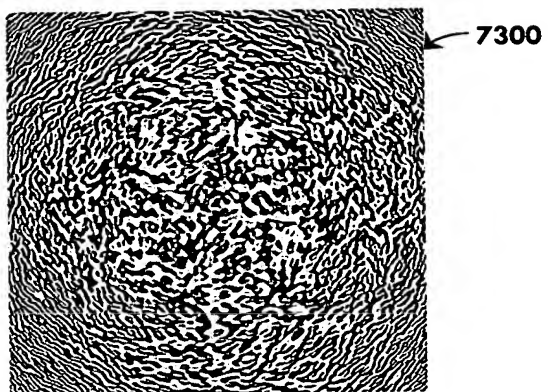


Figure 74A

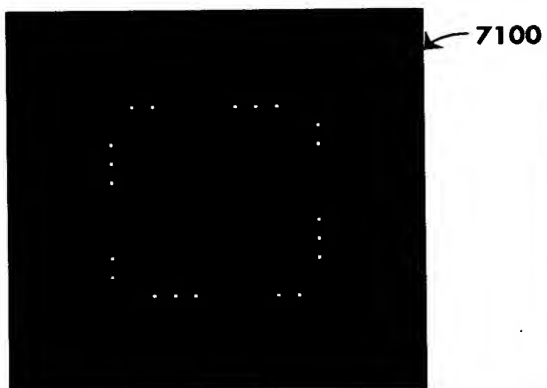


Figure 74B

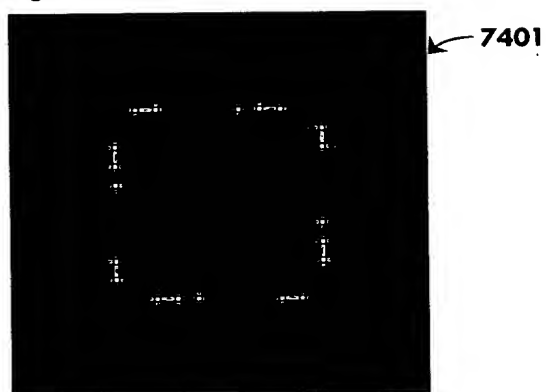


Figure 75A

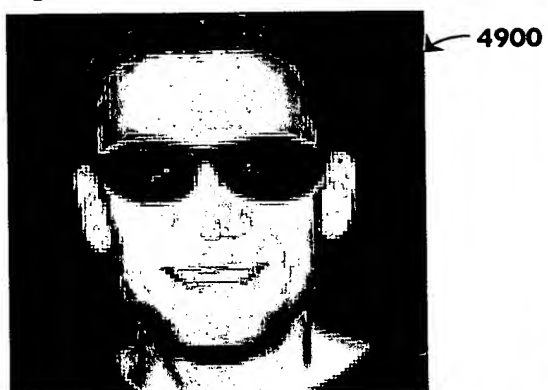


Figure 75B

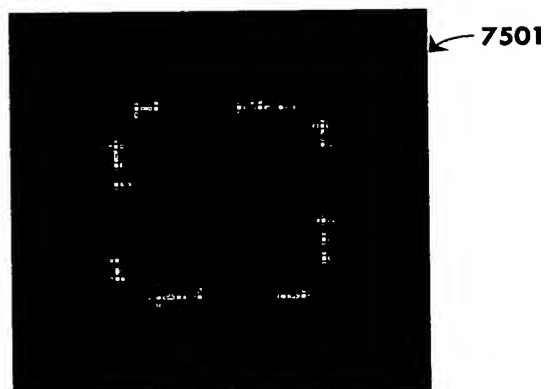
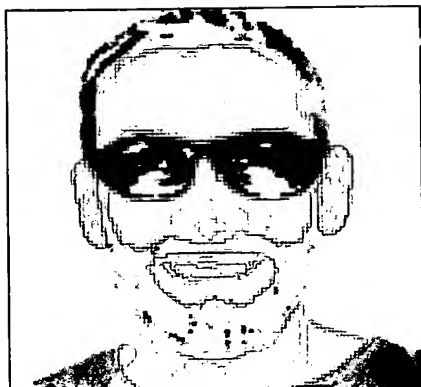
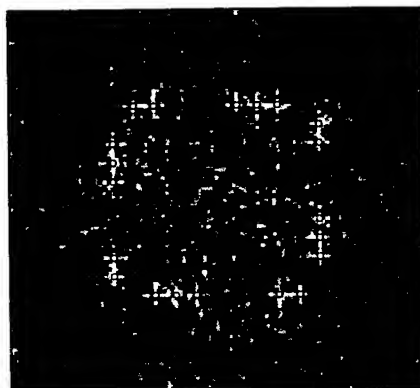


Figure 76A



5000

Figure 76B



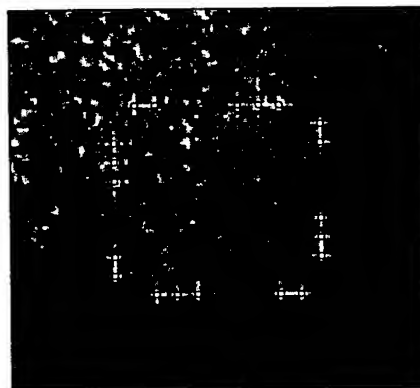
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Figure 77A



5200

Figure 77B



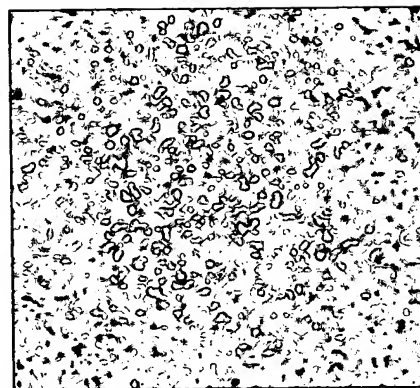
7701

Figure 78A



5400

Figure 78B



7801

Figure 79

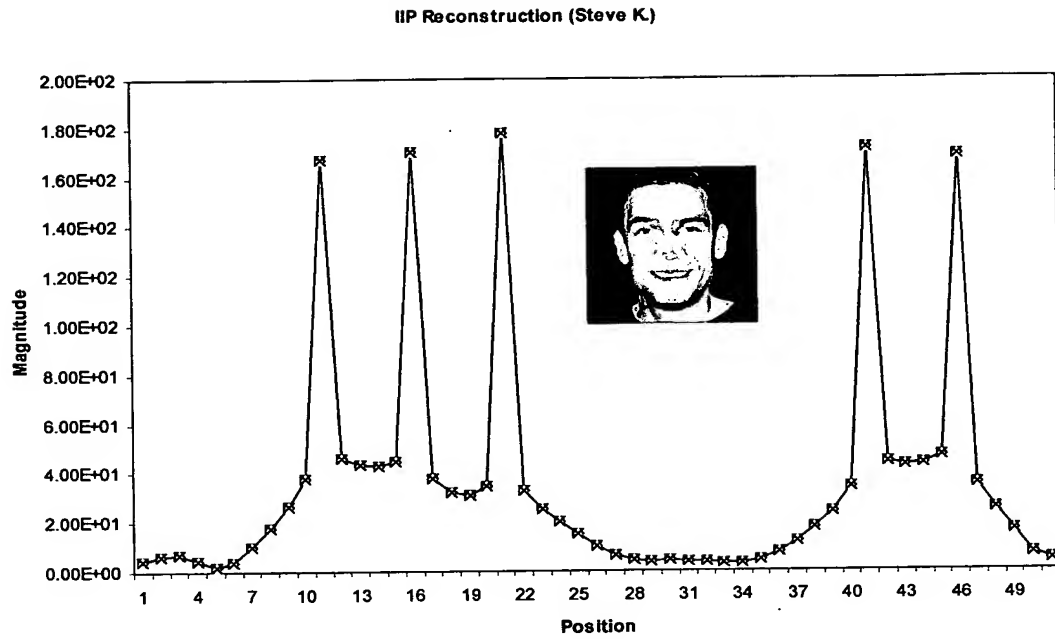


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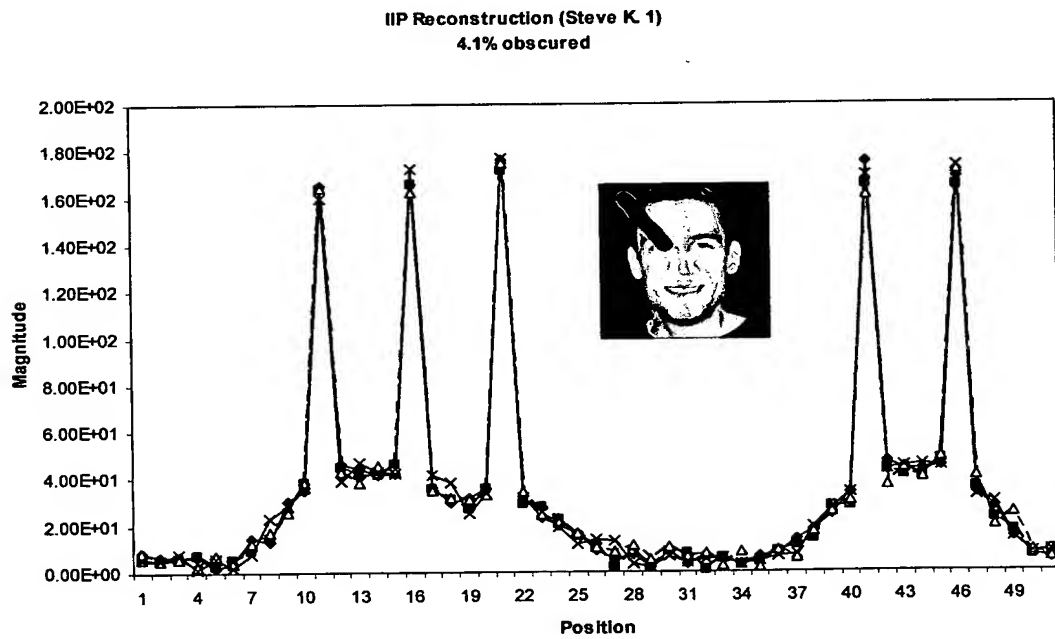


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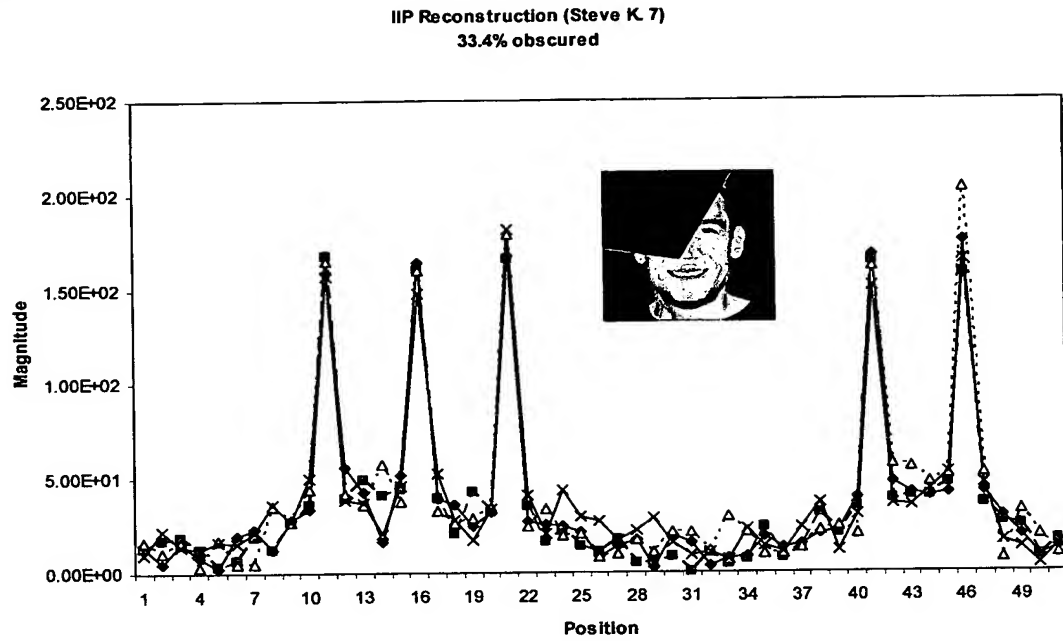


Figure 82

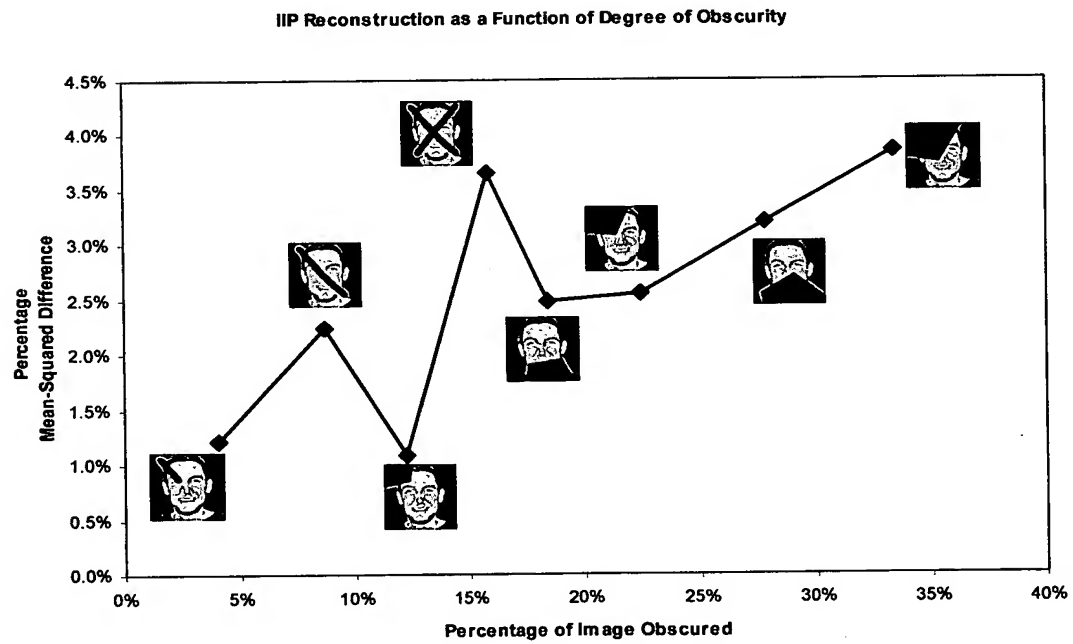
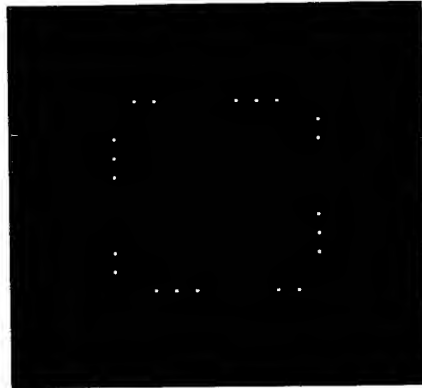


Figure 83A



3800

Figure 83B



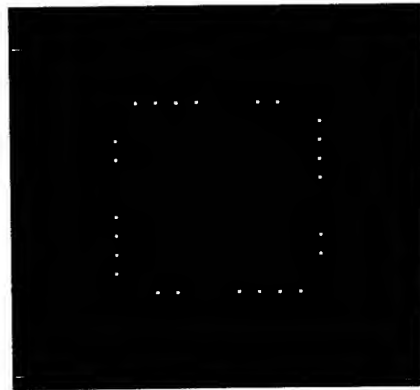
8301

Figure 84A



5300

Figure 84B



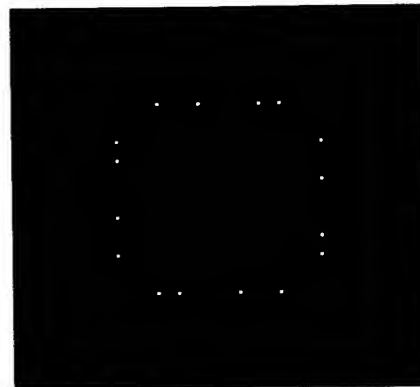
8401

Figure 85A



8500

Figure 85B



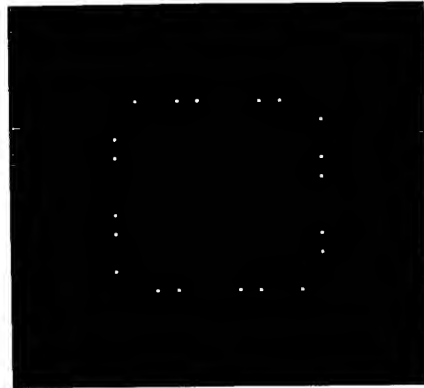
8501

Figure 86A



5400

Figure 86B



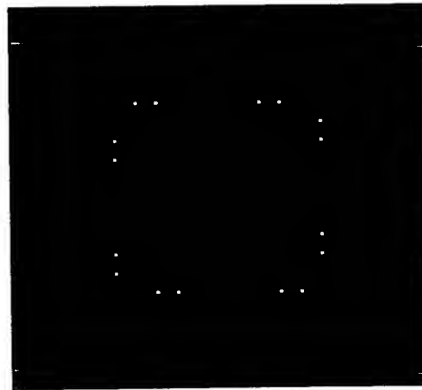
8601

Figure 87A



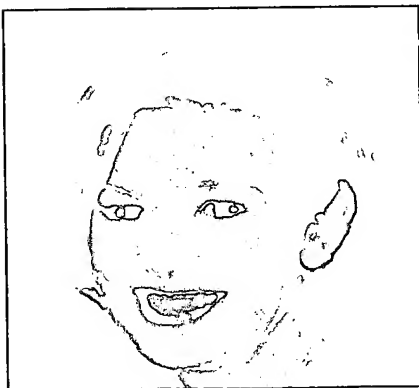
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Figure 87B



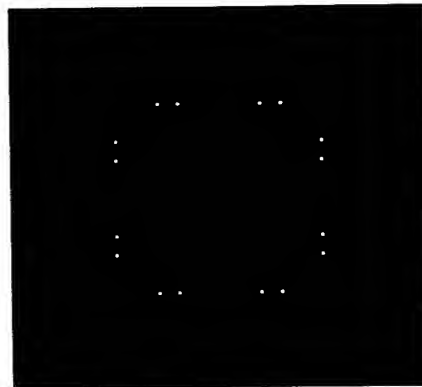
8701

Figure 88A



8800

Figure 88B



8801

Figure 89A



Figure 89B

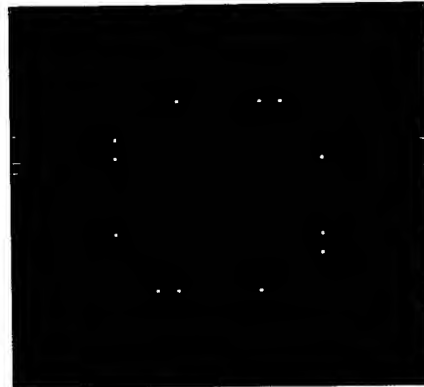


Figure 90

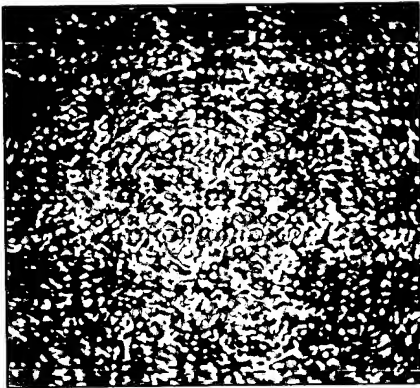


Figure 91

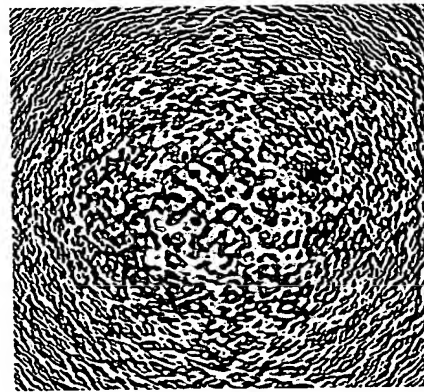


Figure 92A



Figure 92B

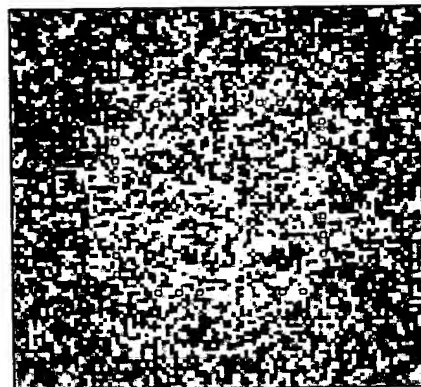
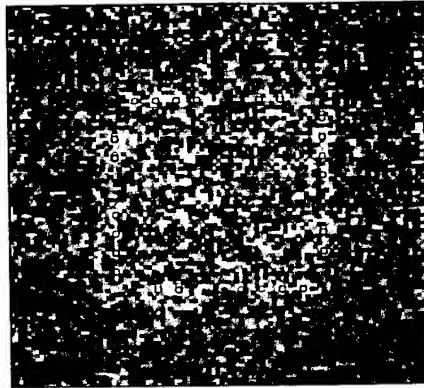


Figure 93A



5300

Figure 93B



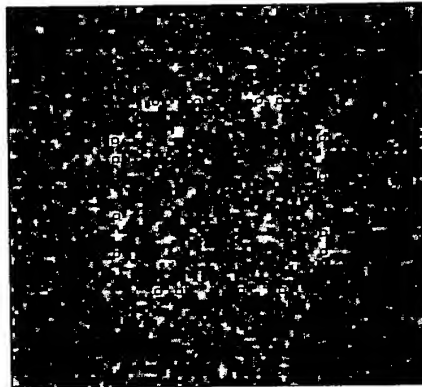
9301

Figure 94A



8500

Figure 94B



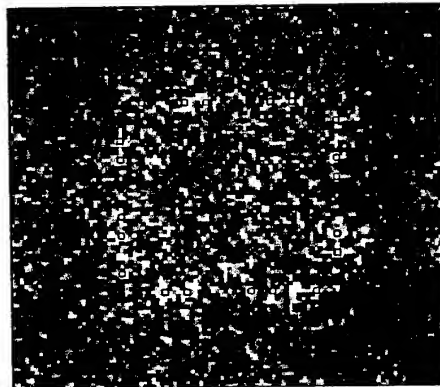
9401

Figure 95A



5400

Figure 95B



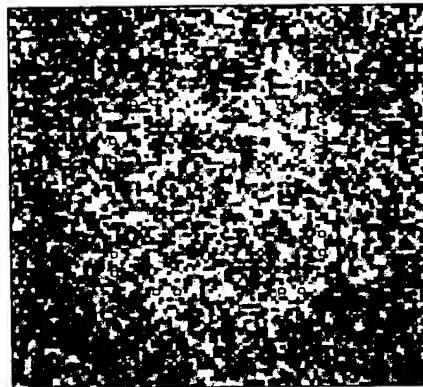
9501

Figure 96A



5500

Figure 96B



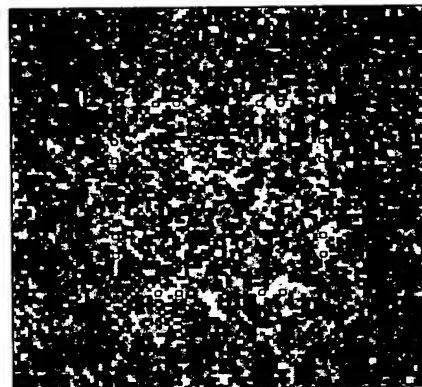
9601

Figure 97A



8800

Figure 97B



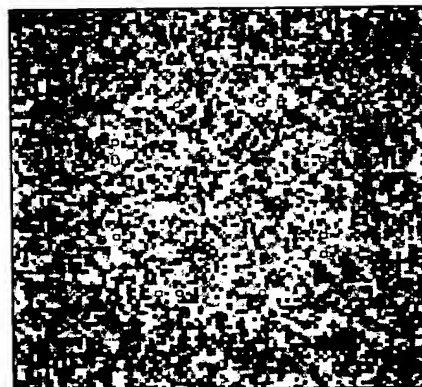
9701

Figure 98A



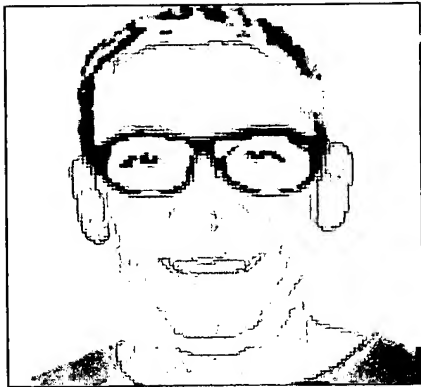
8900

Figure 98B



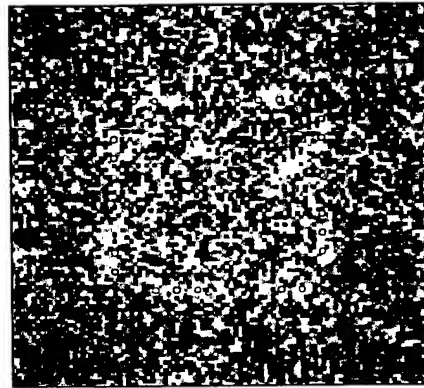
9801

Figure 99A



4800

Figure 99B



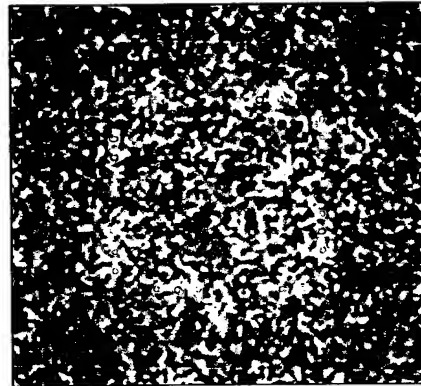
9901

Figure 100A



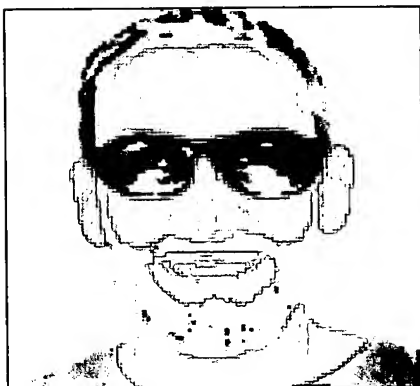
4900

Figure 100B



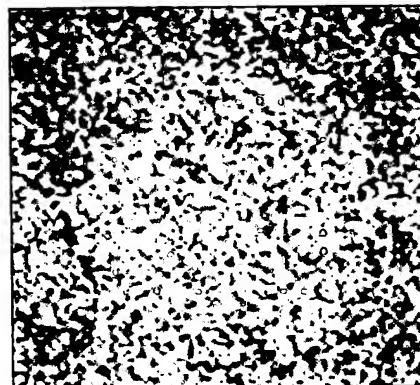
10001

Figure 101A



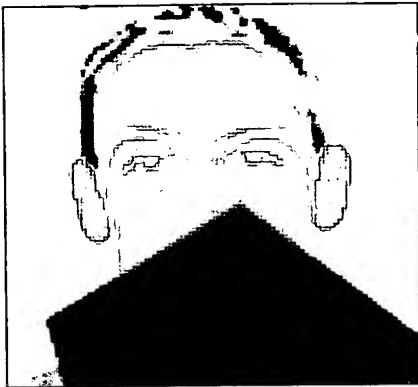
5000

Figure 101B



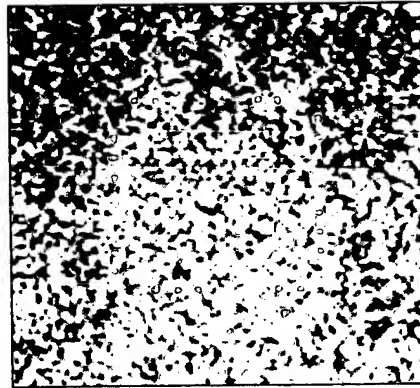
10101

Figure 102A



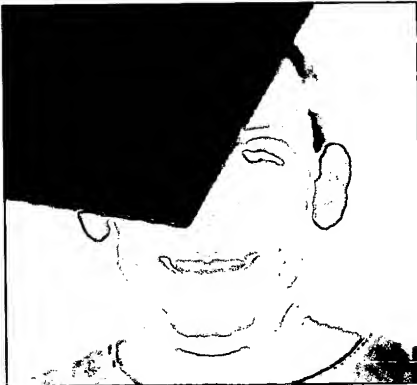
5100

Figure 102B



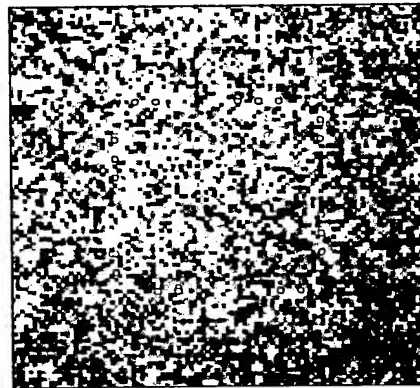
10201

Figure 103A



5200

Figure 103B



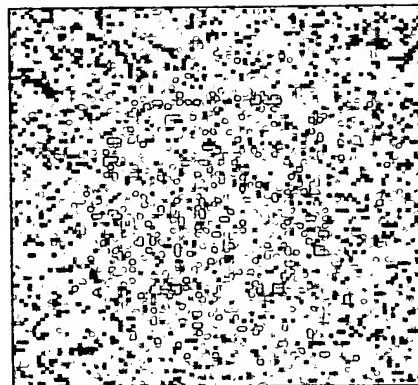
10301

Figure 104A



10400

Figure 104B



10401

Figure 105



10500

Figure 106



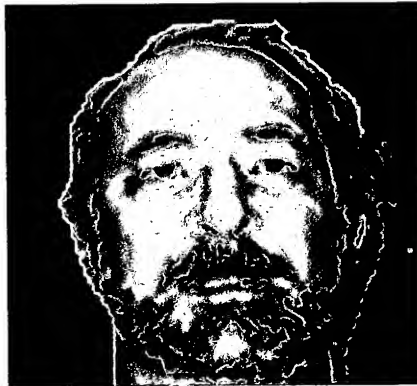
10501

Figure 107



10502

Figure 108



10503

Figure 109



10504

Figure 110



11000

Figure 111



11100

Figure 112



11200

Figure 113



11300

Figure 114



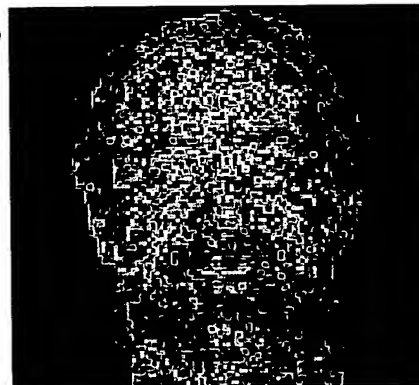
11400

Figure 115



11500

Figure 116



11600

Figure 117



Figure 118A

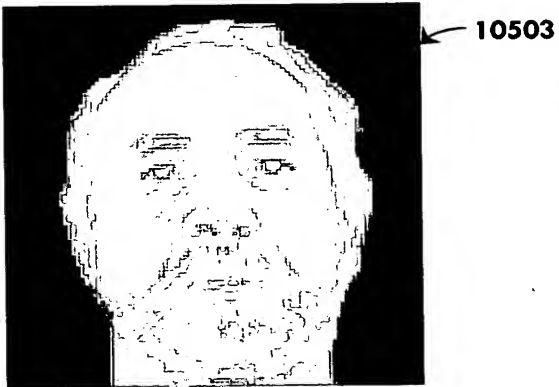


Figure 118B

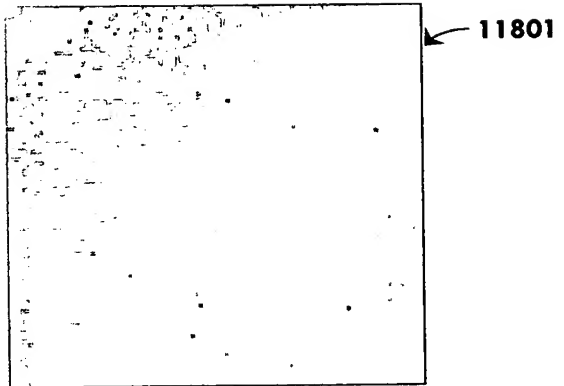


Figure 119A

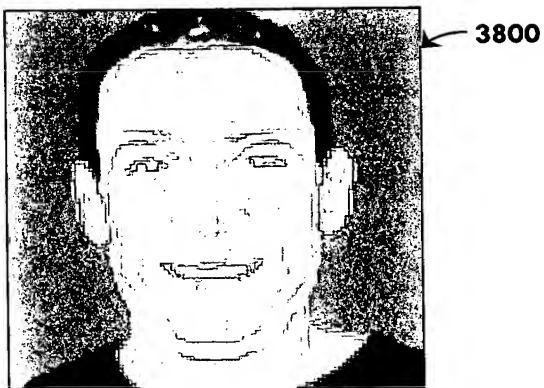


Figure 119B

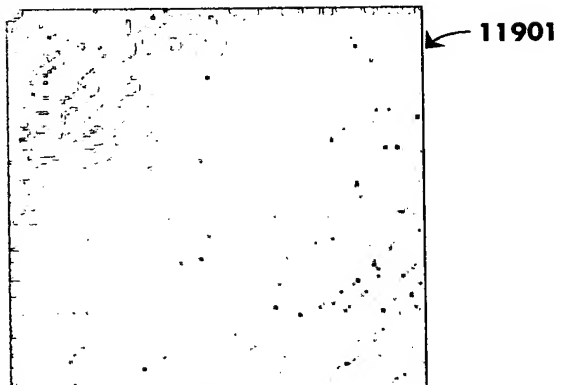


Figure 120A

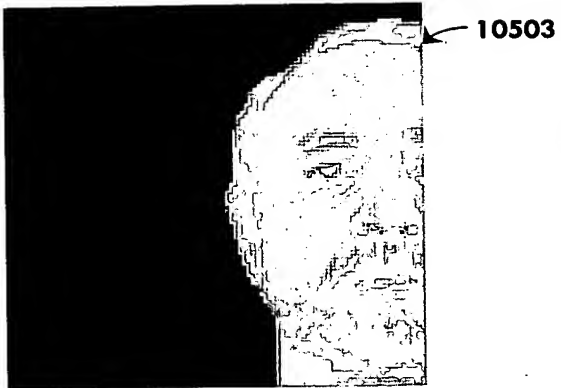


Figure 120B

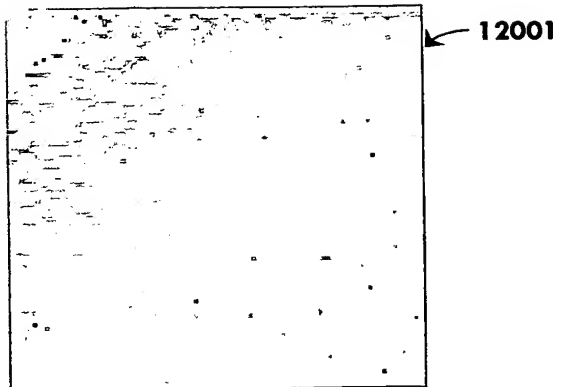


Figure 121

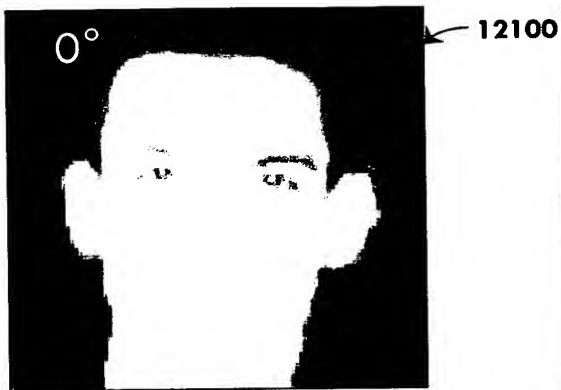


Figure 122

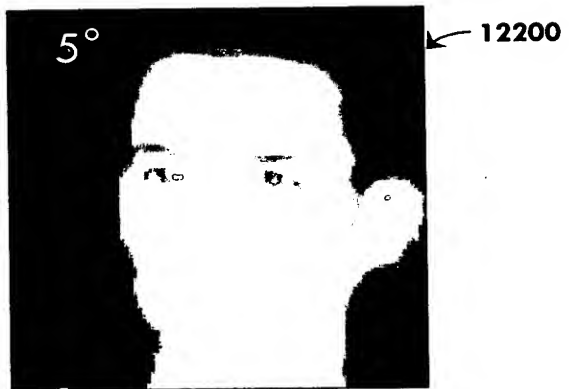


Figure 123

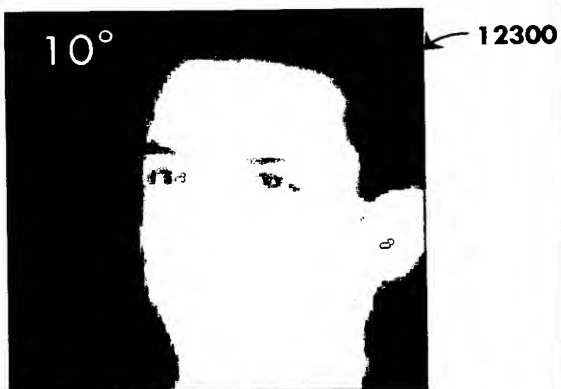
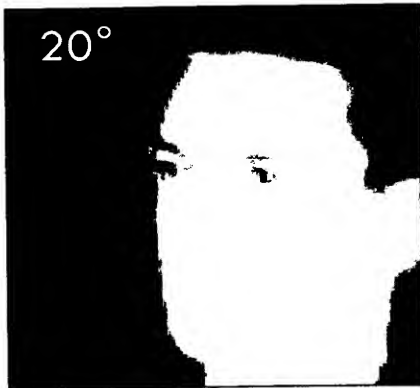


Figure 124

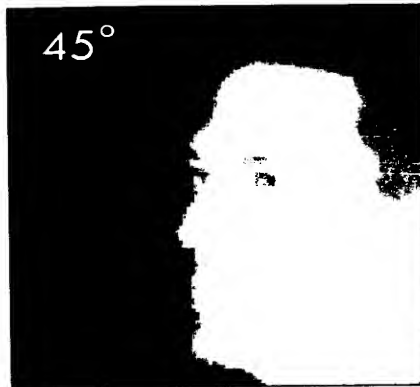


Figure 125



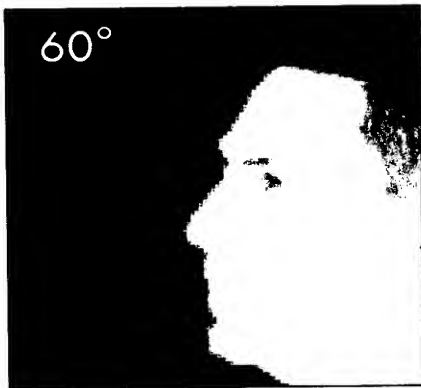
12500

Figure 126



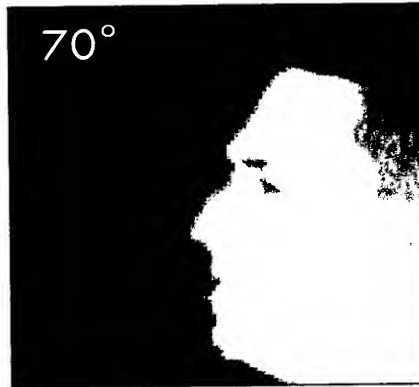
12600

Figure 127



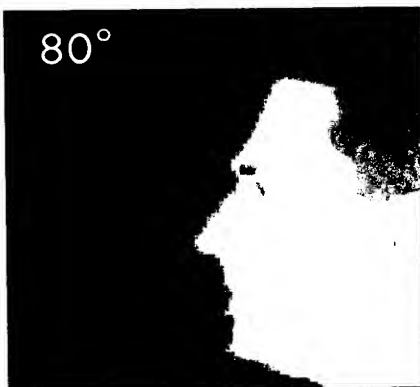
12700

Figure 128



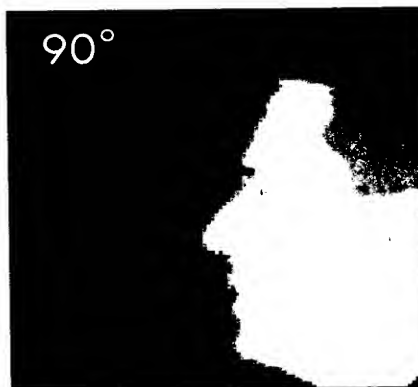
12800

Figure 129



12900

Figure 130



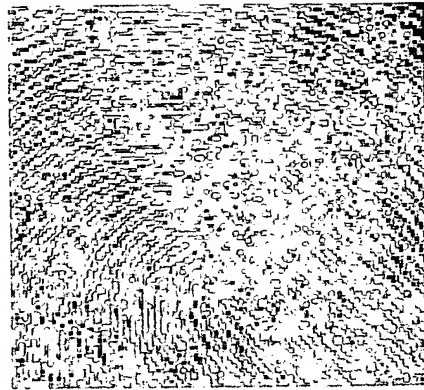
13000

Figure 131



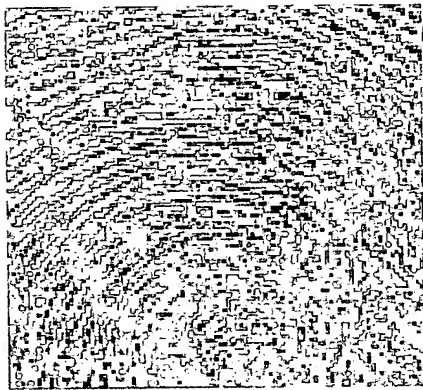
13100

Figure 132



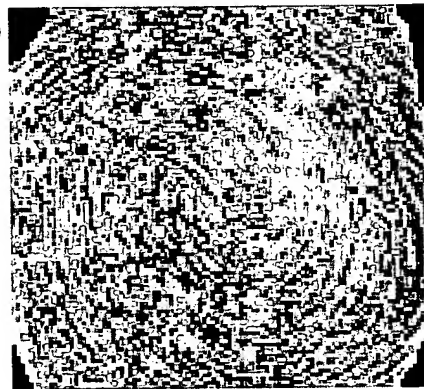
13200

Figure 133



13300

Figure 134



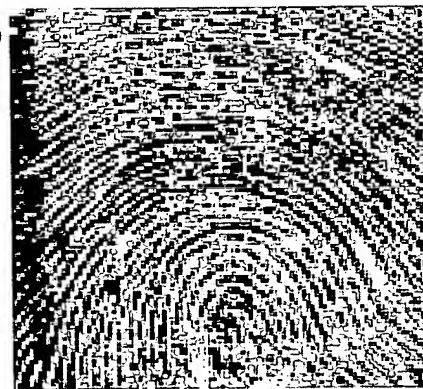
13400

Figure 135



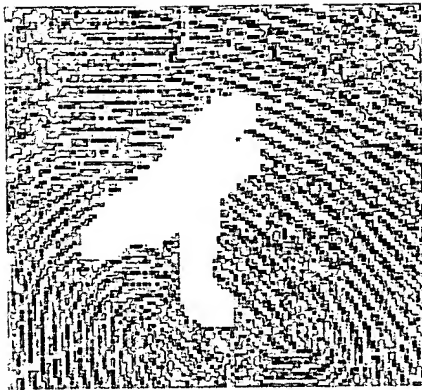
13500

Figure 136



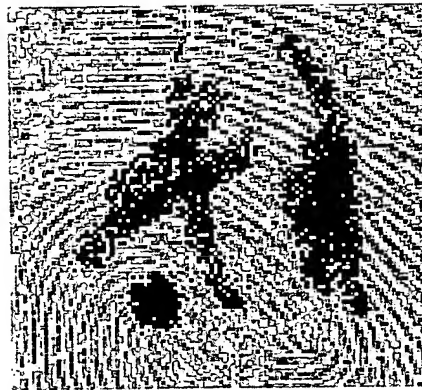
13600

Figure 137



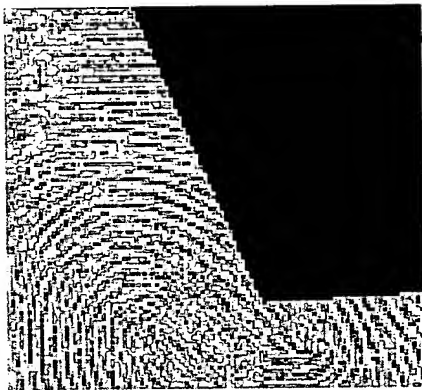
13700

Figure 138



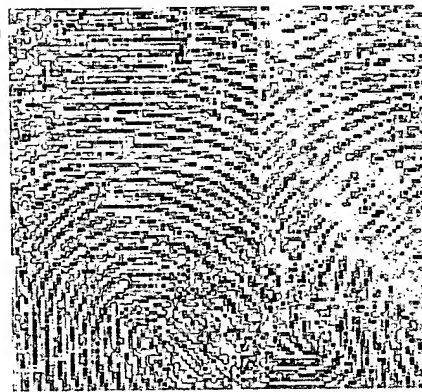
13800

Figure 139



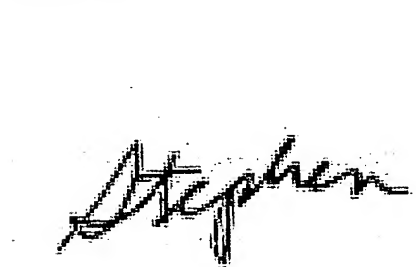
13900

Figure 140



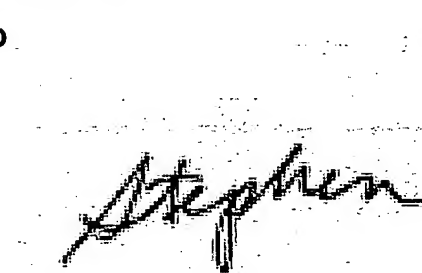
14000

Figure 141



14100

Figure 142



14200

57/74

Figure 143

Figure 144

← 14300

← 14400

Stephen

Stephen

Figure 145

Figure 145

Figure 146

← 14500

← 14600

Stephen

Stephen

Figure 147

Figure 148

← 14700

← 14800

Stephen

Stephen

58/74

Figure 149

Figure 150

← 14900

← 15000

Stephen

Stephen

Figure 151

← 15100

Paul

Figure 152A

Flowchart for software embodiment: Overall Control

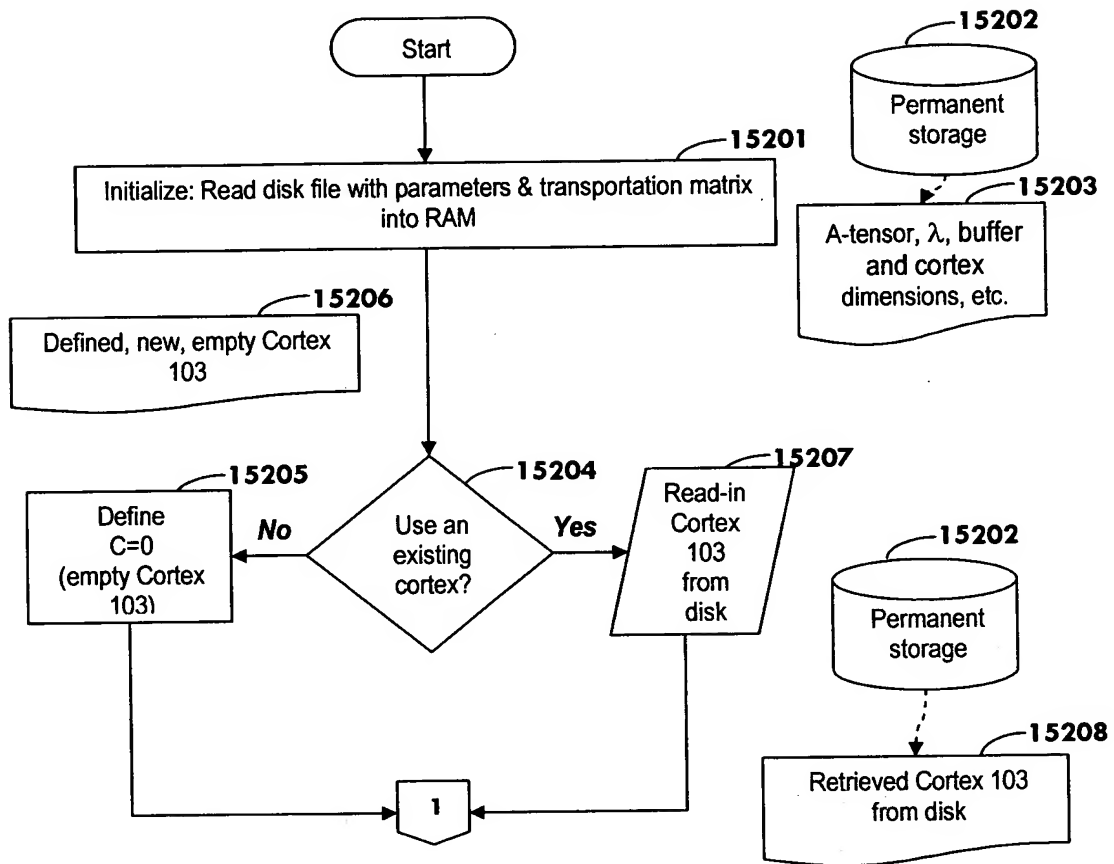


Figure 152B

Flowchart for software embodiment: Overall Control (continued)

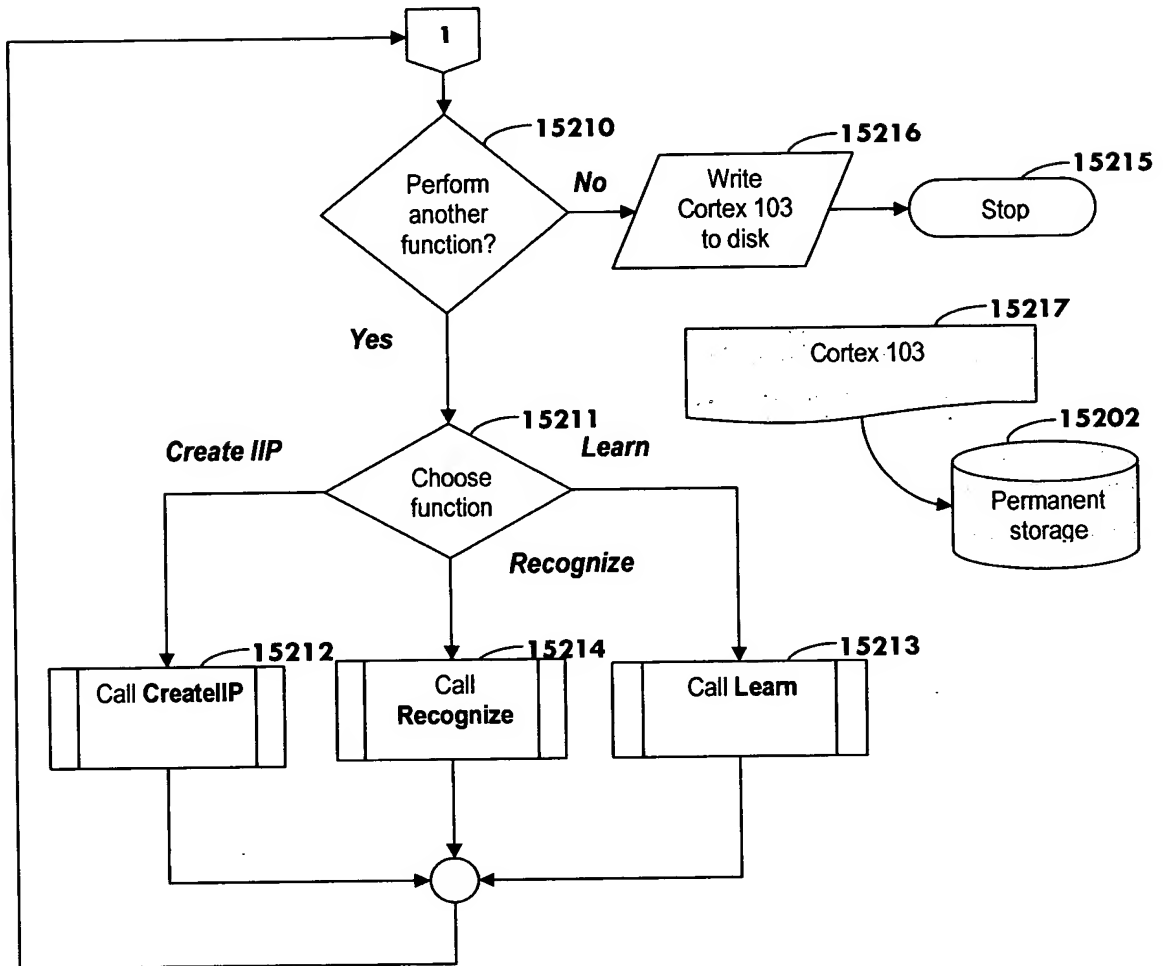


Figure 153

Flowchart for software embodiment: Create IIP

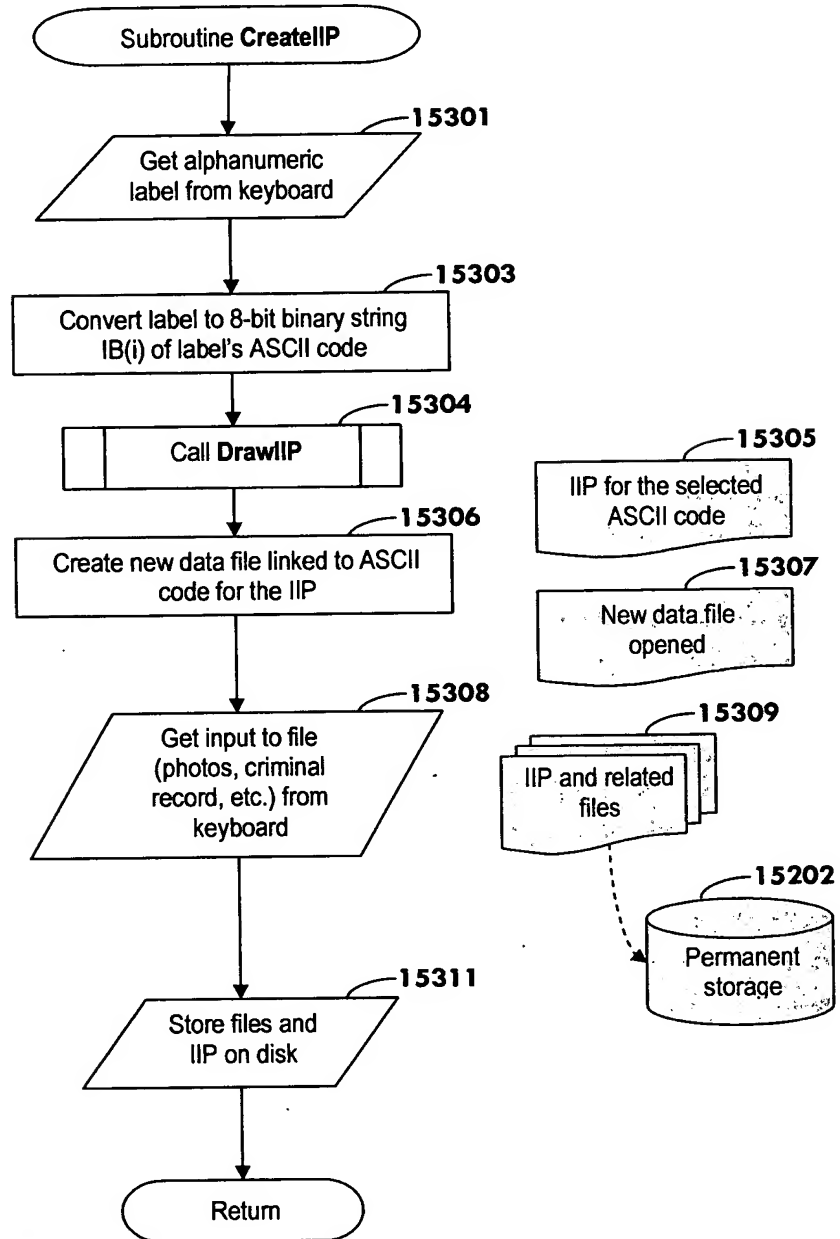


Figure 154A

Flowchart for software embodiment: Learn

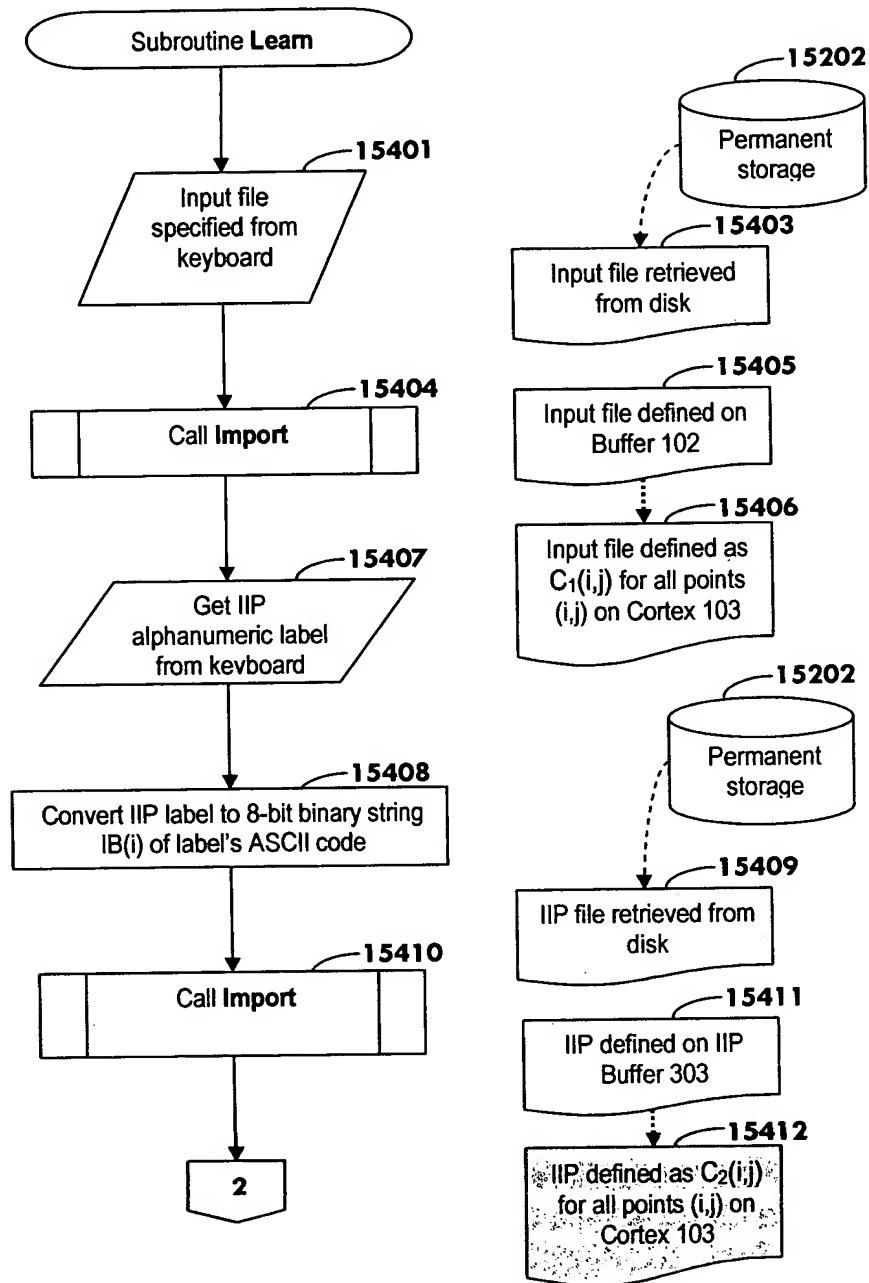


Figure 154B

Flowchart for software embodiment: Learn (continued)

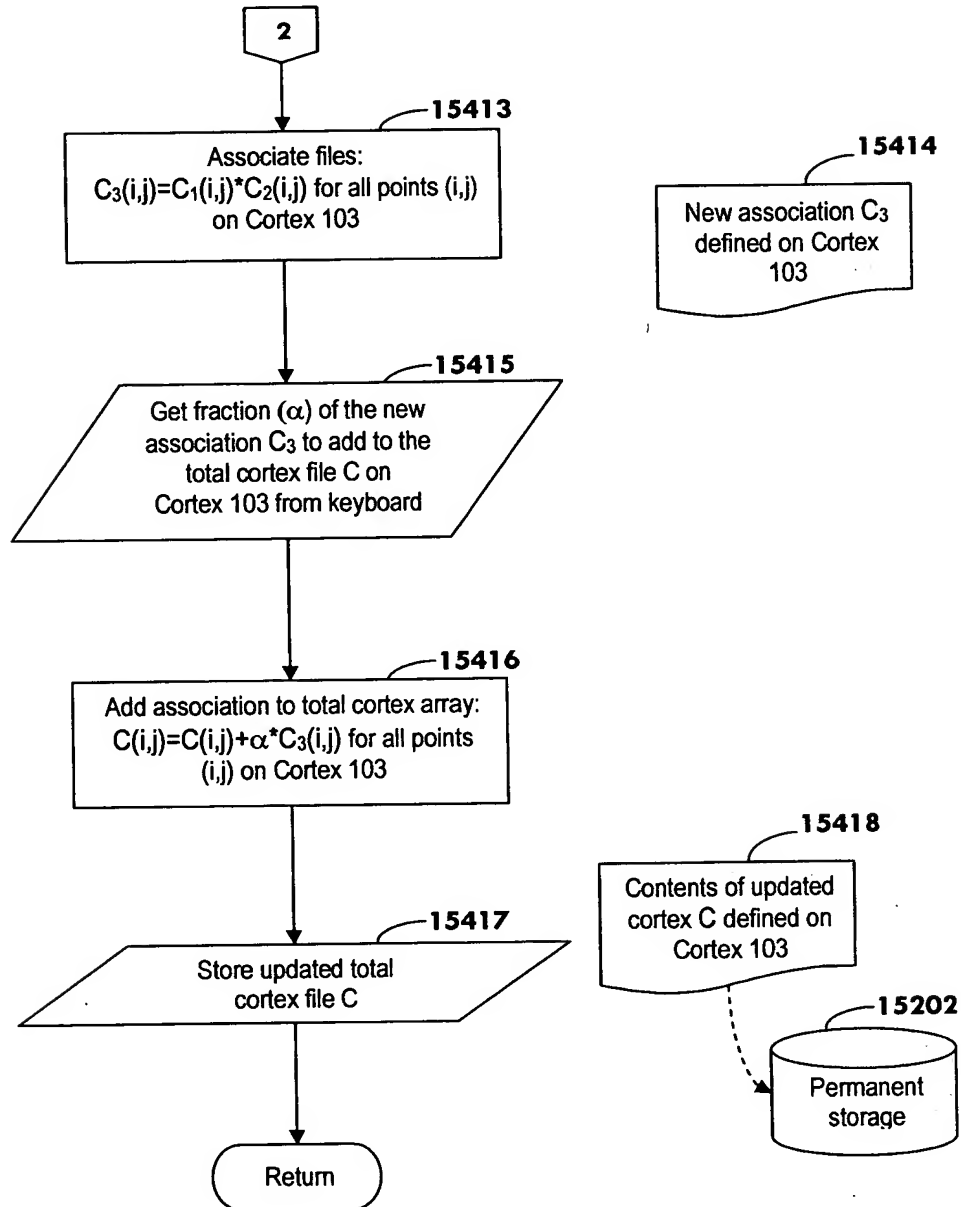


Figure 155A

Flowchart for software embodiment: Recognize

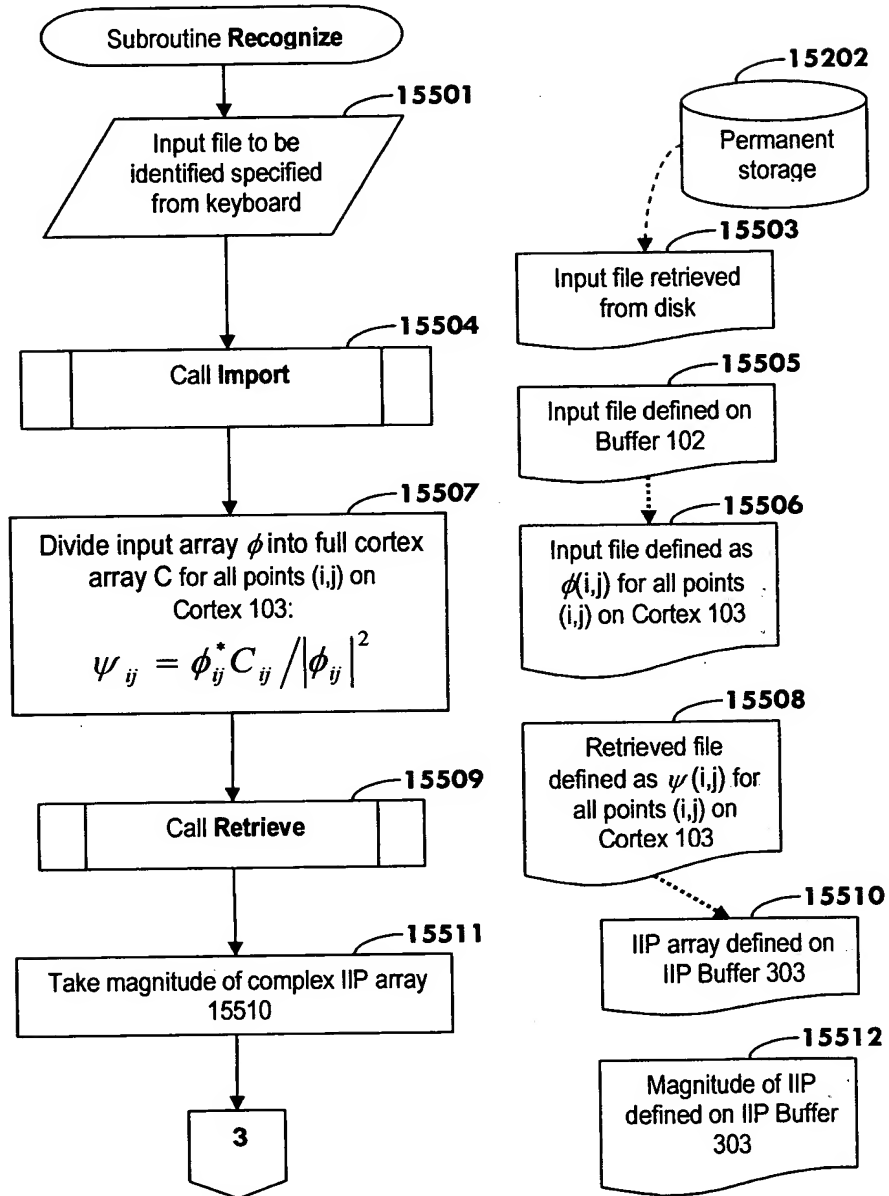


Figure 155B

Flowchart for software embodiment: Recognize (continued)

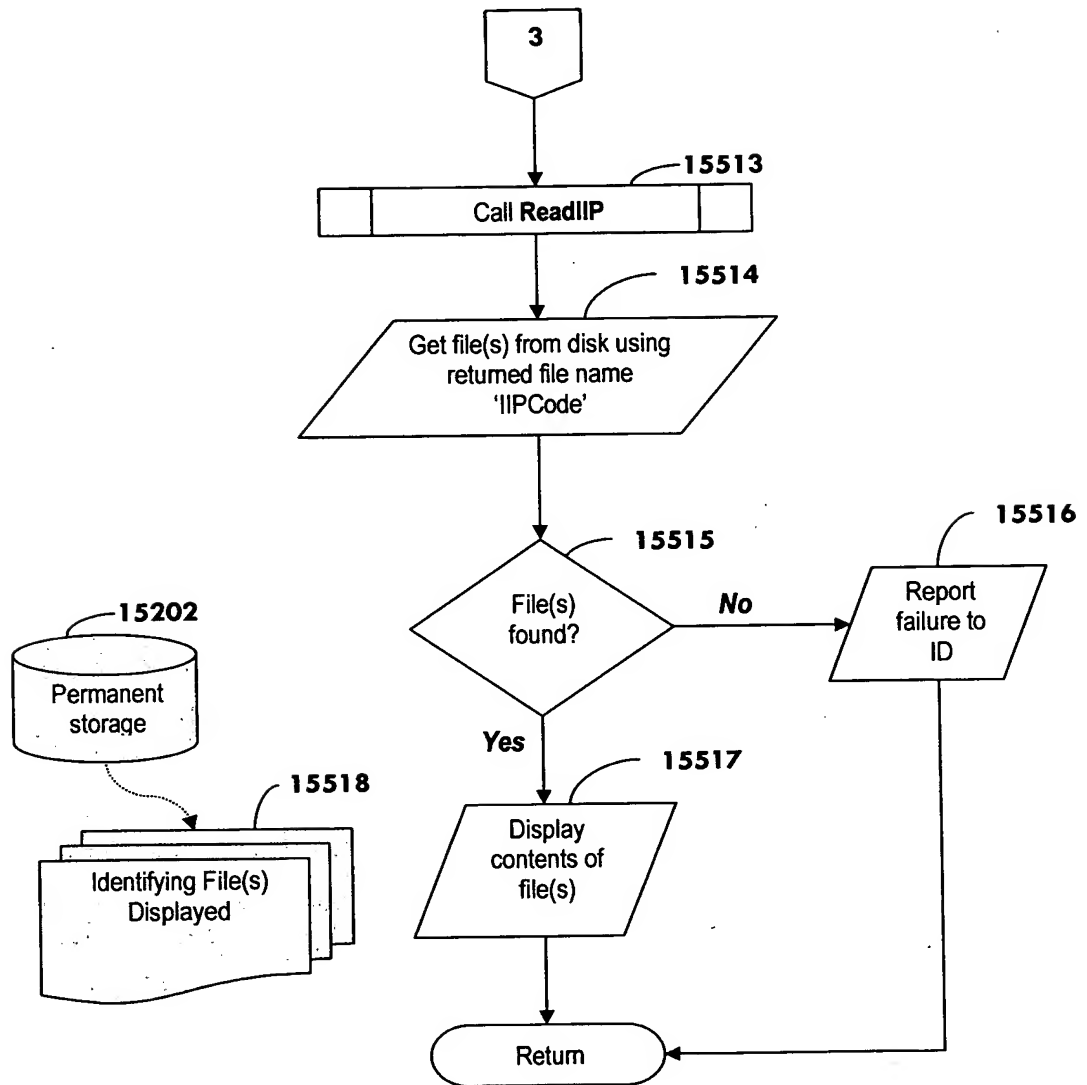


Figure 156A

Flowchart for software embodiment: Draw IIP

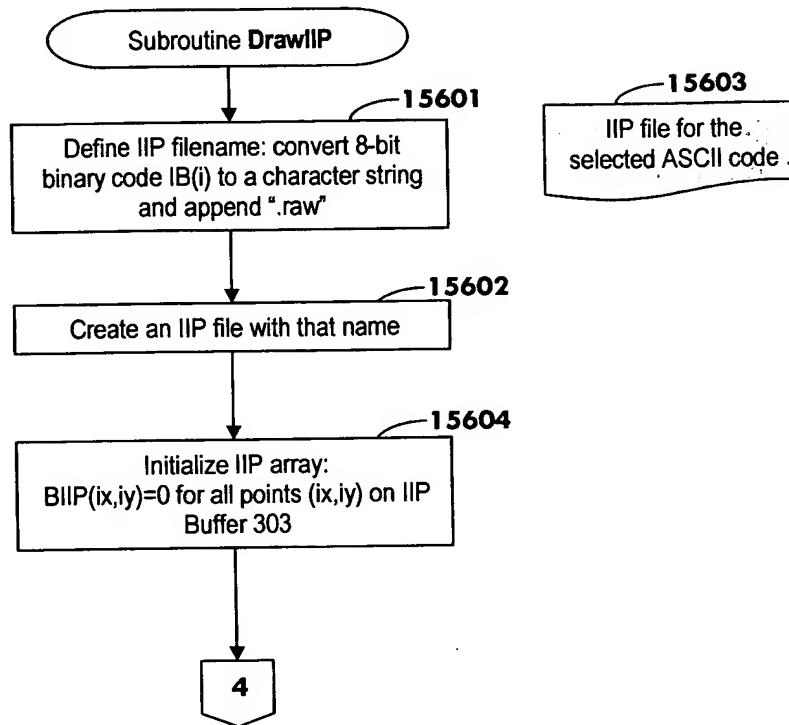


Figure 156B

Flowchart for software embodiment: Draw IIP (continued)

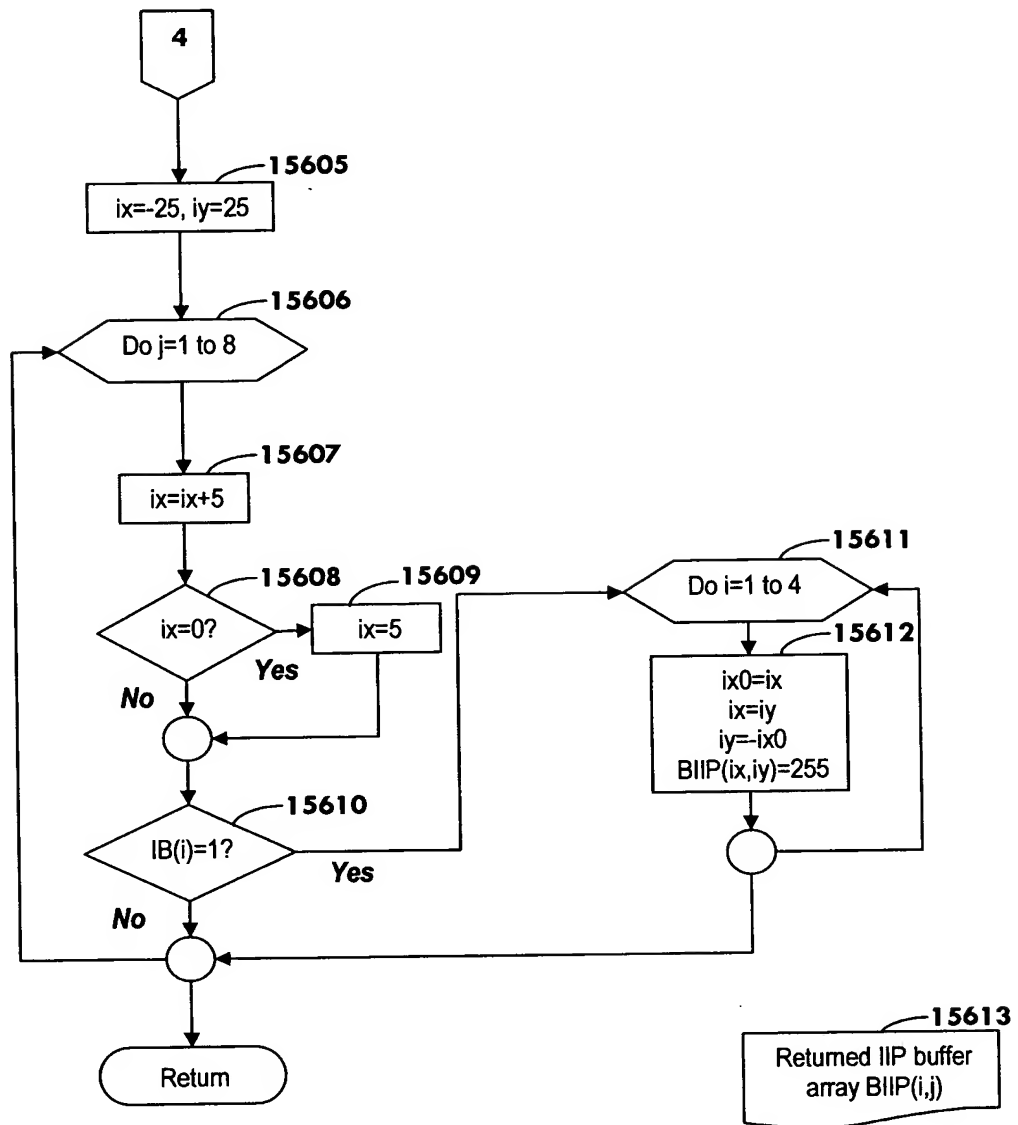


Figure 157

Flowchart for software embodiment: Import

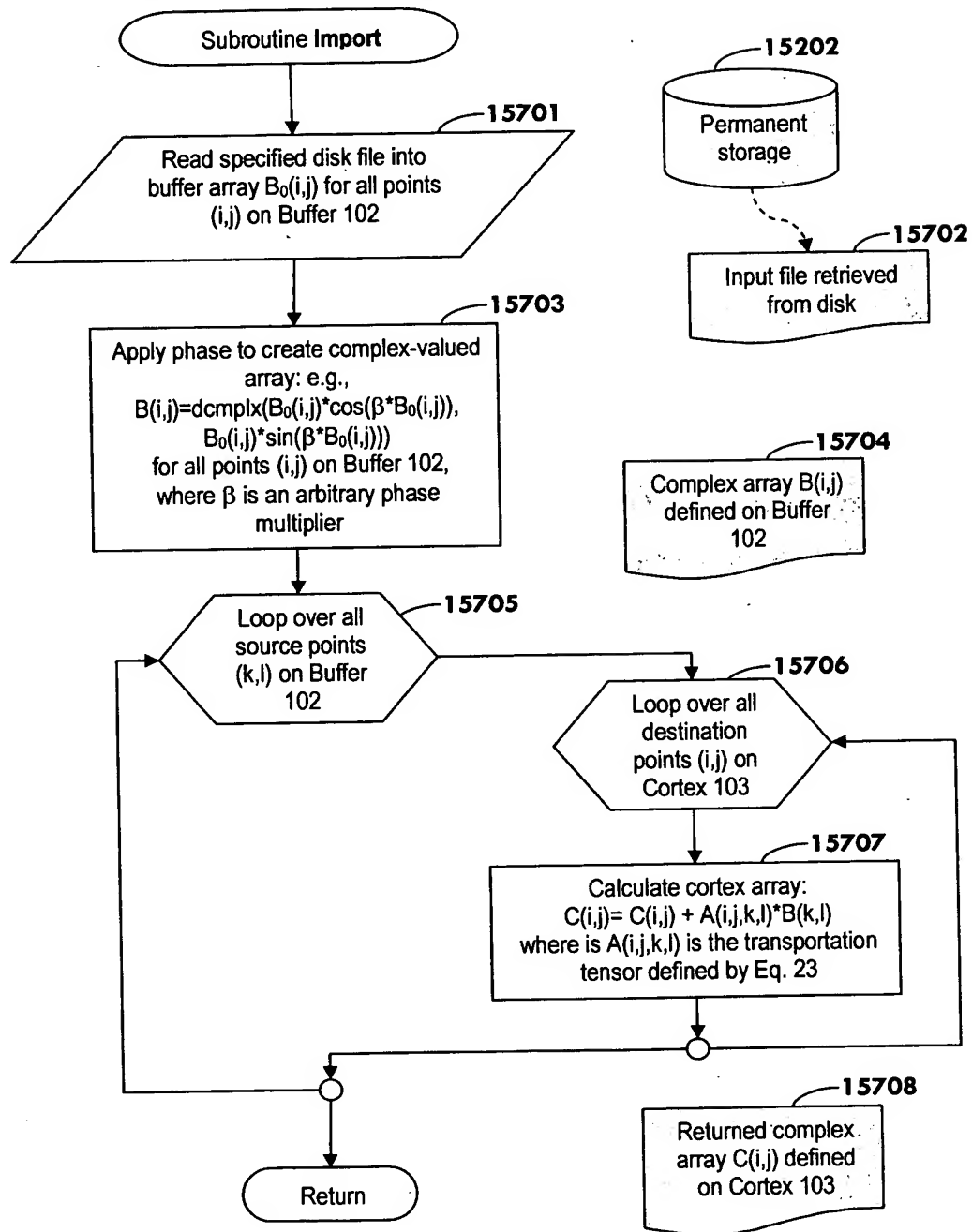


Figure 158

Flowchart for software embodiment: Retrieve

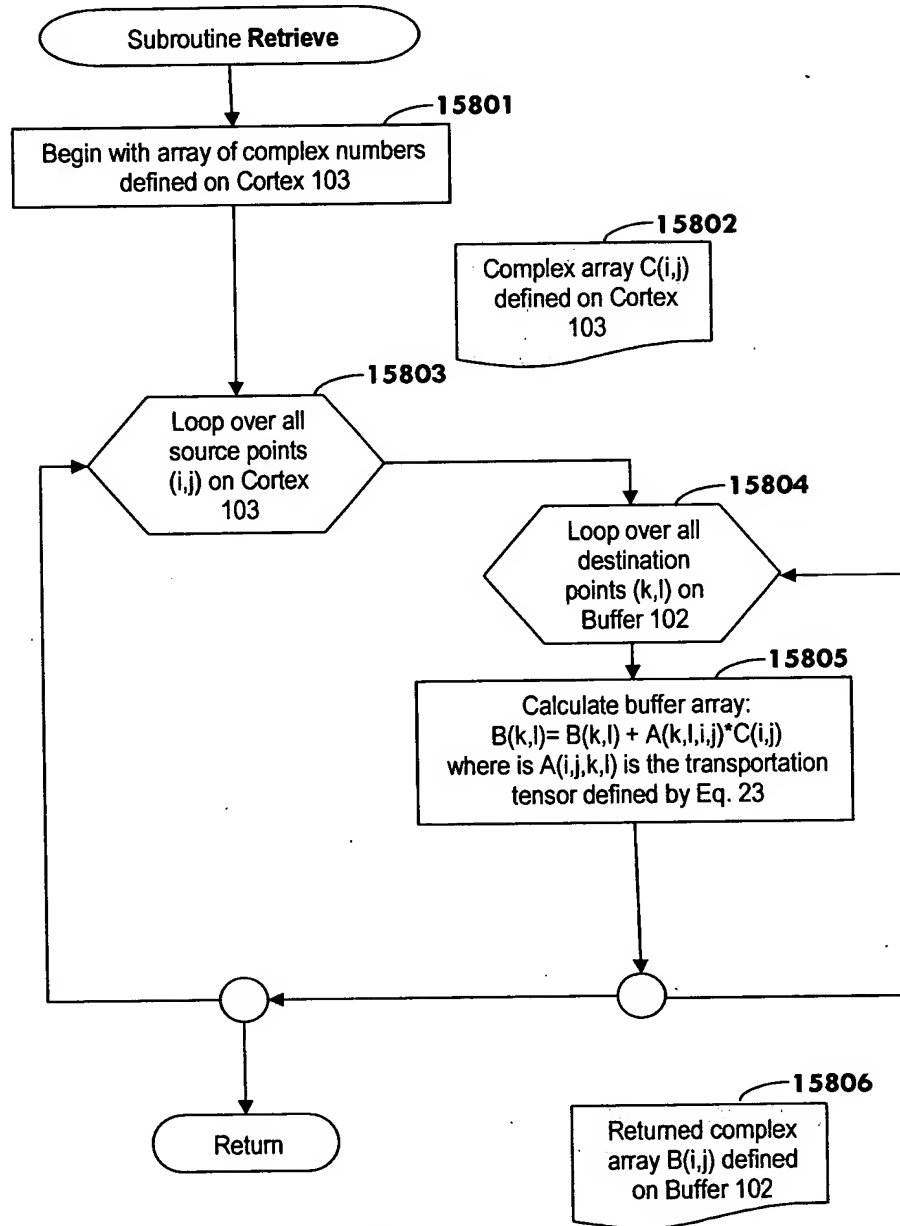


Figure 159A

Flowchart for software embodiment: Read IIP

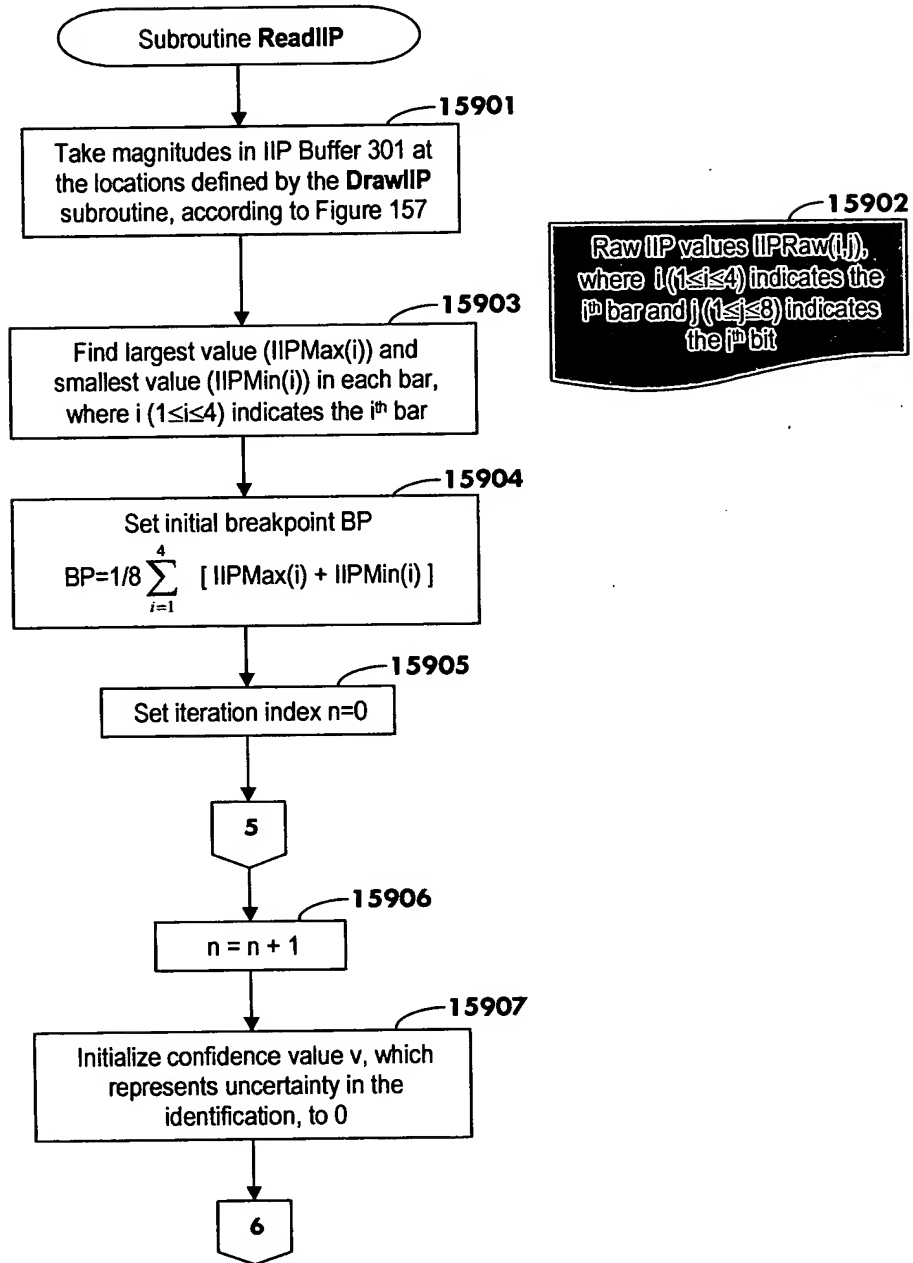


Figure 159B

Flowchart for software embodiment: Read IIP (continued)

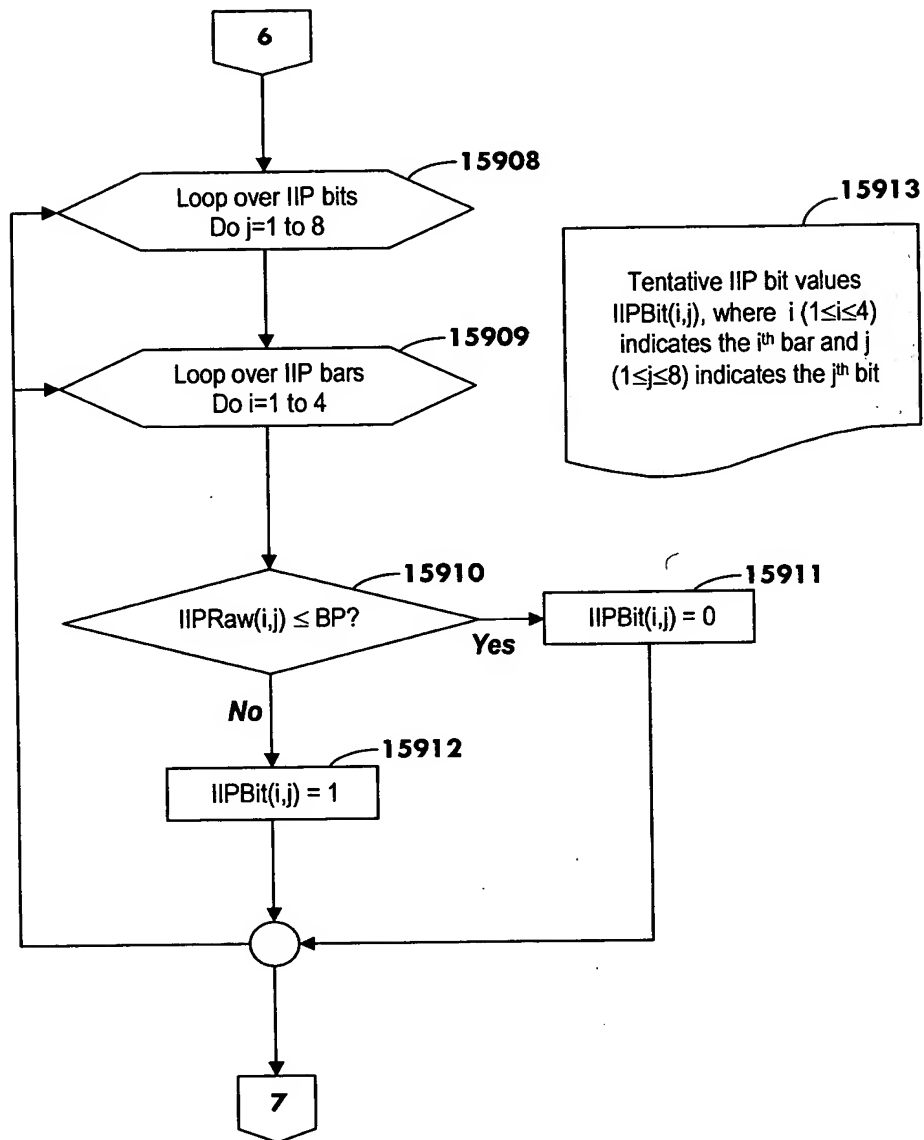


Figure 159C

Flowchart for software embodiment: Read IIP (continued)

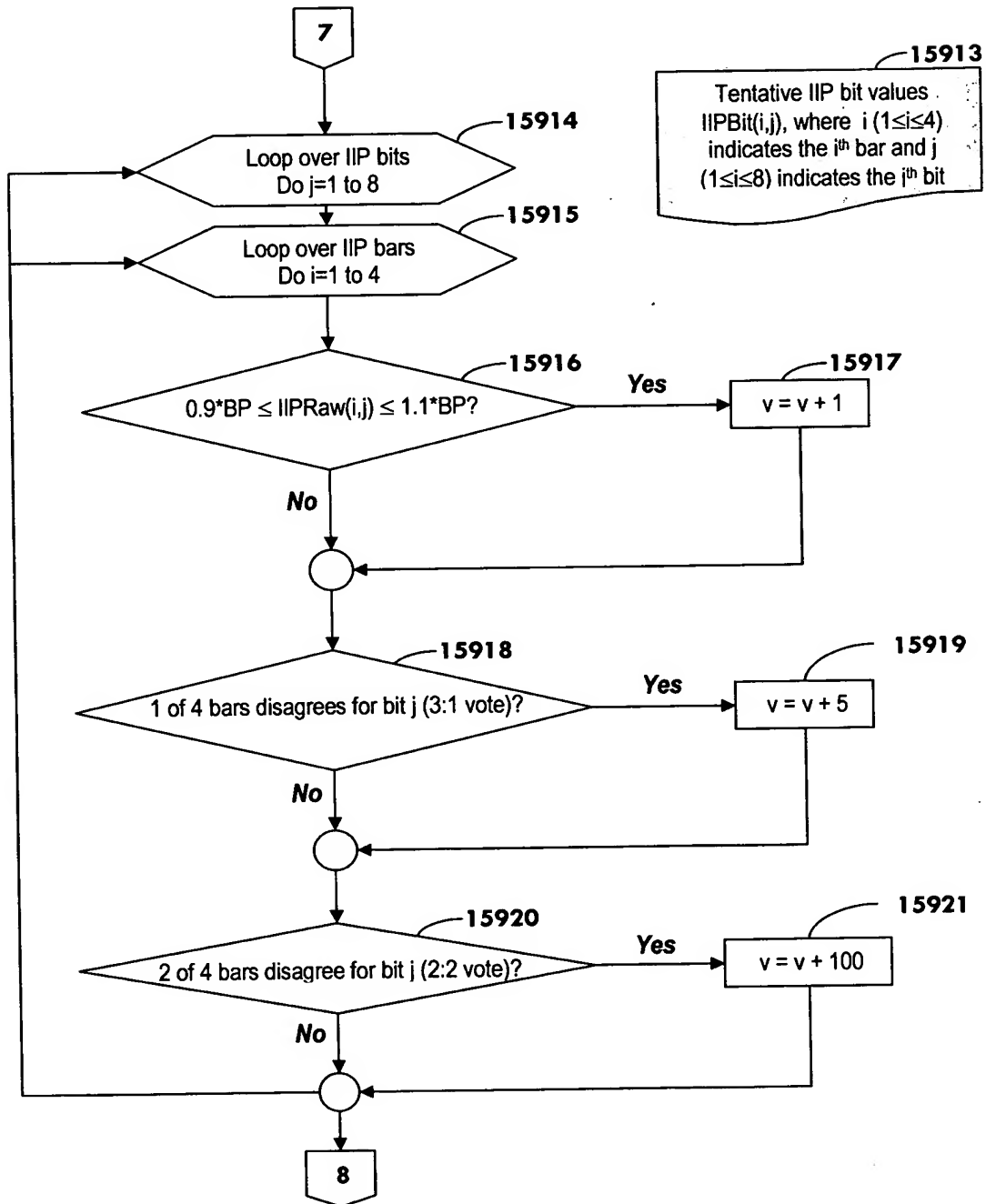


Figure 159D

Flowchart for software embodiment: Read IIP (continued)

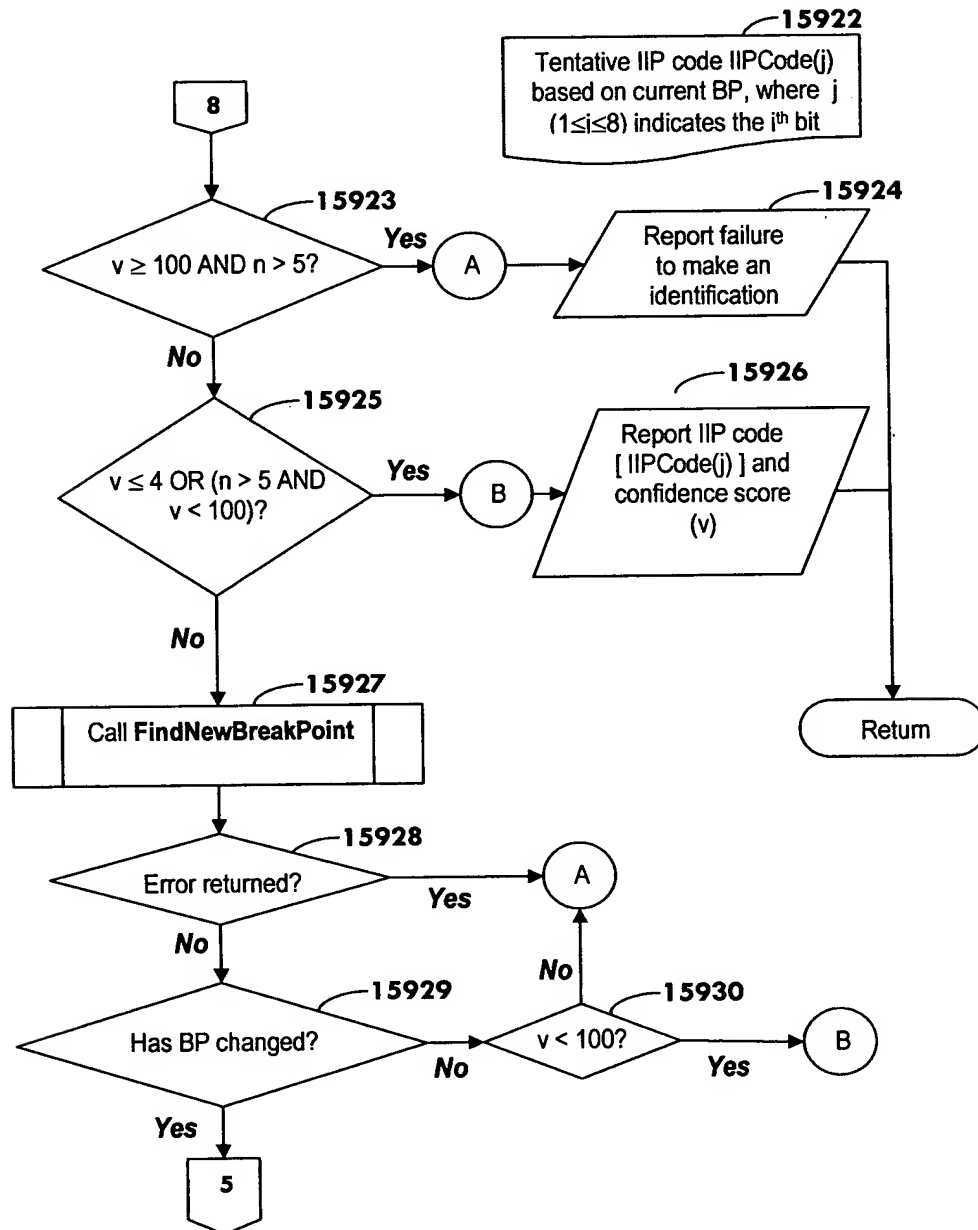


Figure 160

Flowchart for software embodiment: Find New BreakPoint

